

## Summary

Horseshoe Bend National Military Park proposes to replace three existing interpretive shelters located on the battlefield. The current shelters, constructed in 1967, are of such size and prominence on the battlefield that they immediately draw attention to themselves, as opposed to the battlefield itself. The shelters are approximately 9 feet tall, 32 feet across, circular structures with steel support posts and flat, gravel roofs. Two of the three shelters are placed in the mowed battlefield. The third shelter is located at the edge of the tree line at the top of a hill, overlooking the Tohopeka Village site.

If implemented, the preferred alternative considered in the Environmental Assessment (EA) would replace the three existing shelters with smaller stone and wood shelters. The overall effect would be of a small lean-to or open hut constructed of earthen materials. The proposed replacements would be approximately 16 feet deep, 24 feet wide, and 9½ feet tall at the front. They would be roofed with a recycled-product artificial wooden shake. This product is based on recycled rubber and plastics, is fairly maintenance free, has a 50 year life span, and looks very much like real wood shake.

The preferred alternative contains the following specific elements. The Tohopeka Village Overlook shelter would be replaced at the same location with no change in surrounding vegetation. The Cotton-patch Hill shelter would be replaced at the same location, but with a modification of the tree line in order to screen the shelter. The shelter at Gun Hill would be relocated approximately 60 feet to move it off the mowed battlefield, to the edge of the tree line.

The objectives of this proposal are: to minimize the visual impact of the structures on the landscape; provide protection from the hot summer sun, thunderstorms and lightning; select the best locations to understand the course of the battle; and to minimize disruption to the natural environment. This would be accomplished by reducing the size of the structures; placing them at the edge of the tree line; and building with materials which would blend into the tree line surrounding the battlefield.

The Alabama State Historical Preservation Officer (SHPO) has given a preliminary concurrence of no adverse effect to the concept of replacing the current shelters to meet the objectives described above. Tribal representatives have been involved in initial discussions concerning this

### *The Purpose of an Environmental Assessment (EA)*

There are three primary purposes of an EA:

- To help determine whether the impact of a proposed action or alternative could be significant, thus indicating that an environmental impact statement (EIS) is needed;
- To aid in compliance with NEPA when no EIS is necessary by evaluating a proposal that will have no significant impacts, but that may have measurable adverse impacts; and
- To facilitate preparation of an EIS if one is necessary.

proposal. Both the SHPO and the culturally affiliated Tribes will be asked to review this EA for purposes of compliance with the park's §106 National Historic Preservation Act obligations.

The proposed action would have no effect on water resources; wildlife; threatened, endangered or special concern species; air quality; lightscapes; soundscapes; Indian trust resources; park operations; museum collections; public health and safety; socioeconomic impacts; environmental justice / protection of children; resource conservation; prime and unique farmlands; and wilderness.

Impacts to geology, topography, vegetation and soils would be minor, and localized. Impacts to cultural, archeological and ethnographic resources; and to cultural landscapes would be minor with no adverse effect. Construction related impacts to visitor experience would be short-term and minor in intensity. Beneficial impacts to visitor experience would be long-term and moderate in intensity.

### **Note to Reviewers and Respondents**

If you wish to comment on the EA/assessment of effect, you may mail comments to the name and address below. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. **Please ensure all comments are received by the park no later than November 10, 2004.**

Please Address Comments to:

Mark Lewis, Superintendent  
Horseshoe Bend National Military Park  
11288 Horseshoe Bend Road  
Daviston, AL 36256

Or you may e-mail comments to: [HOBESuperintendent@nps.gov](mailto:HOBESuperintendent@nps.gov)

## Table Of Contents

Item	Page
Summary .....	i
Table of Contents .....	iii
List of Tables and Figures .....	v
<b>Chapter 1 Purpose and Need</b> .....	1
1.1 Background .....	1
1.2 Purpose .....	3
1.3 Need .....	4
1.4 Issues Analyzed in the E.A. ....	7
1.5 Issues Eliminated from Further Analysis .....	10
<b>Chapter 2 Alternatives</b> .....	18
2.1 Alternative 1 - No Action .....	18
2.2 Alternative 2 - Replace in Place .....	18
2.3 Alternative 3 - Relocate and Replace .....	20
2.4 Alternative 4 - Preferred Alternative .....	23
2.5 Mitigation Measures of the Preferred Alternative .....	28
2.6 Environmentally Preferred Alternative .....	29
<b>Chapter 3 Assessment of Effects on Cultural Resources and § 106 Compliance</b> .....	31
3.1 Process of Assessment of Effects to Cultural Resources .....	31
3.2 Section 106 Summary .....	31
<b>Chapter 4 Environmental Analysis</b> .....	33
4.1 Methodology for Assessing Impacts .....	33
4.2 Cumulative Impacts .....	33
4.3 Impact Analysis - Geology, Topography and Soils .....	34
4.4 Impact Analysis - Cultural, Archeological and Ethnographic Resources .....	37
4.5 Impact Analysis - Cultural Landscapes .....	40
4.6 Impact Analysis - Visitor Experience .....	44
4.7 Conclusions .....	48
<b>Chapter 5 Conclusions</b> .....	48
5.1 Effects on Natural Resources .....	48
5.2 Effects on Cultural Resources .....	48
5.3 Cumulative Effects .....	48
5.4 Comparison of Alternatives .....	49
<b>Chapter 6 Consultation and Coordination</b> .....	51
6.1 Internal Scoping Meetings .....	51
6.2 External Scoping Meetings .....	51

6.3	Public Notification.....	52
6.4	Agency Consultation.....	52
6.5	Tribal Consultation.....	52
<b>Chapter 7</b>	<b>References.....</b>	<b>53</b>
	Glossary, Acronyms and Bibliography.....	53
	Appendix A - Newspaper Notice .....	54
	Appendix B - Correspondence with State Historical Preservation Officer.....	55

## List of Tables and Figures

<b>Tables</b>	<b>Page</b>
1 The Purpose of an E.A. ....	i
2 Impact Topics.....	17
3 Threshold of Change - Geology, Topography and Soils .....	34
4 Threshold of Change - Cultural, Archeological and Ethnographic Resources.....	37
5 Threshold of Change - Cultural Landscapes .....	41
6 Threshold of Change - Visitor Experience .....	44
7 Comparison of Effects .....	49
8 Comparison of Accomplishment of the Objectives .....	49

<b>Figures</b>	<b>Page</b>
1 Map of Horseshoe Bend National Military Park .....	2
2 Cotton-patch Hill - View from Parking Lot.....	4
3 Cotton-patch Hill - Close-up View .....	4
4 Gun Hill Shelter - View from Parking Lot .....	5
5 Gun Hill Shelter - View from Congressional Monument.....	5
6 Tohopeka Seen from Village Overlook Shelter and Nature Trail.....	6
7 Tohopeka Village Overlook Shelter as seen from the Loop Road .....	6
8 Replacement Shelter - Conceptual Drawing.....	19
9 Cotton-patch Hill Shelter - Relocation Map .....	20
10 Gun Hill Shelter - Relocation Map .....	22
11 Replacement Shelter - Conceptual Drawing.....	23
12 Cotton-patch Hill Showing Contour Lines .....	25
13 Cotton-patch Hill Showing Modified Tree Line.....	25
14 Gun Hill Shelter - Relocation Map .....	26
15 Tohopeka Village Overlook Shelter Map .....	28

## 1.0 PURPOSE AND NEED

### 1.1 Background

Horseshoe Bend National Military Park is located in a rural section of east central Alabama in Tallapoosa County, on State Highway 49, 12 miles north of the town of Dadeville (see map on following page). The park is situated near the southern end of the Piedmont Plateau and encompasses 2,040 acres. It contains low rolling hills, which range in elevation from 535 feet to 680 feet above sea level, and approximately 4 miles of the Tallapoosa River, which meanders through the park.

In August 1959, President Dwight D. Eisenhower signed the Proclamation establishing Horseshoe Bend National Military Park, enacting the park's enabling legislation, passed four years earlier. The 2,040-acre park was established to memorialize the final and most critical battle of the Creek Indian War.

The Creek Indian War consisted of 17 battles or skirmishes with the final and most significant battle fought at Horseshoe Bend on March 27, 1814. In this battle, 3,300 frontier troops and Indian allies under the command of Andrew Jackson defeated 1,000 Red Stick Creek warriors who had fortified themselves behind a seemingly impregnable log barricade. More than 800 Creek Indians were killed, ending for all time the military power of the Creek Nation.

As a result of this battle, much of Alabama and Georgia was opened to American settlement, paving the way for Alabama's statehood five years later. The battle was also a critical step toward the forced removal of southeastern American Indians from their ancestral homes.

Today the park includes the site of the fortified Creek position as well as the outlying areas of the battlefield, from which General Jackson, to the north, and Colonel John Coffee, to the south, attacked the Red Stick Creeks. In addition to the battlefield, the park includes a portion of the late 1700's / early 1800's Creek town site of Newyaucau, and forested land surrounding the battlefield. A tour road with parking pull-offs and interpretive signs was constructed in 1964, and three interpretive shelters were built in 1967. The entire park was accepted for National Register listing in 1976 as the Horseshoe Bend National Military Park Historic District.

According the Council on Environmental Quality's regulations regarding the National Environmental Policy Act (NEPA), there are three primary purposes of an Environmental Assessment (EA): (1) to help determine whether the impact of a proposed action or alternative could be significant, thus indicating that an environmental impact statement (EIS) is needed; (2) to aid in compliance with NEPA when no EIS is necessary by evaluating a proposal that will have no significant impacts, but that may have measurable adverse impacts; and (3) to facilitate preparation of an EIS if one is necessary. This Environmental Assessment (EA) is being prepared to analyze the impacts of alternatives considered to address the purpose, need, and objectives discussed below.

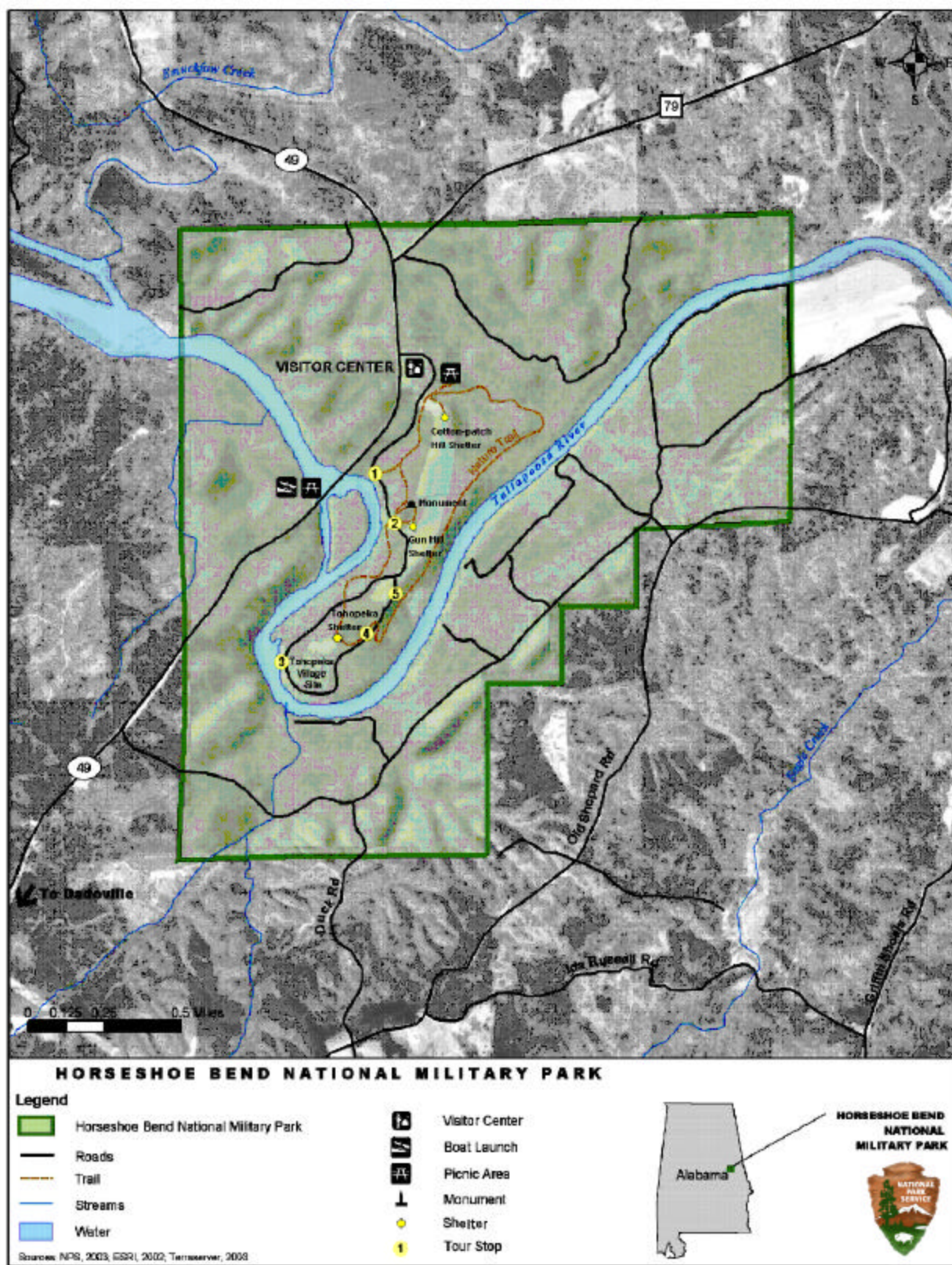


Figure 1

## 1.2 Purpose

Legislation establishing the park (Pub.L. 84-800) directs the National Park Service (NPS) to “administer, protect, and develop the park,” subject to the provisions of the NPS Organic Act. The legislation then states, “to provide for the proper development and maintenance of the park, the Secretary of the Interior shall construct and maintain therein such roads, trails, markers, buildings, and other improvements, and such facilities for the care and accommodation of visitors, as he may deem necessary.”<sup>1</sup>

The park’s Purpose Statement affirms: “*The purpose of Horseshoe Bend National Military Park is to commemorate the Battle of Horseshoe Bend and the people involved in the battle; to develop the means for the public to understand, appreciate, benefit from, and enjoy the park; to preserve the battlefield and associated landscape; and to interpret the cultural relationships and conflicts leading to the Creek War as well as the War’s impact on the Creek people, and on the War of 1812 and on the western expansion of the United States and the role this war played in the career of Andrew Jackson and the development of our nation.*” (HOBE Strategic Plan)<sup>2</sup>

The objectives of this proposal are to:

- Develop ways to minimize the visual impact of structures on the cultural landscape;
- Provide appropriate cover to park visitors from the heat of the summer sun, from thunderstorms and from lightning;
- select the best locations to understand the course of the battle; and
- minimize disruption to the natural environment.

The first and third objectives incorporate the park’s desire to improve the cultural landscape and enhance the opportunity for visitor education. The historic scene was most likely a clearing in the tall mixed hardwood and long leaf pine forest. The clearing probably would have been created as the Red Stick Creeks cut the trees they would use in the construction of their log barricade. The Creeks would have also ensured there was an open field of fire in front of them, so their enemy would not have cover to hide behind.

The park endeavors to maintain this view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines. The site is best interpreted by capturing the visitors’ attention by the natural topography before them, allowing them to visualize the position of the barricade and Creek warriors and the placement of the cannons and soldiers and the Indian allies. Because there is nothing left of the barricade, the Service has erected a row of white stakes to mark its location. The view of these stakes and the natural topography of the battlefield are essential to understanding the battle and the heroic events which took place here.

The second objective specifically addresses visitor experience and visitor education. As described above, the first and third objectives deal with the degree of understanding that an appropriate cultural landscape enables. This second objective deals with visitors taking the time to look and listen. Formal and informal interpretive tours and discussions take place on the battlefield, and during the hot summer, almost all of those discussions take place under the shade of the shelters. Experience has shown that visitors will not stand in the hot, Alabama summer sun to listen to history discussions, no matter how engaging the speakers may be. The park’s ability to develop an in-depth dialogue with visitors on the battlefield is dependent on having a



shaded area that provides views of the important topographical features of the battlefield. The shelters also provide refuge from rain storms and summer lightning storms which sometimes catch hikers off guard.

The fourth objective emphasizes the park's desire to keep disturbances to the natural environment to a minimum, while also accomplishing the other objectives.

### **1.3 Need**

The park currently has three interpretive shelters (shown on the previous map) at:

- Cotton-patch Hill
- Gun Hill
- Tohopeka Village Overlook

#### **Cotton-patch Hill Shelter**

The first interpretive shelter a visitor sees, upon arriving at the park, is at Cotton-patch Hill. A large grassy slope leads uphill from the Entrance Road and parking lot. From the parking lot and from the park road, the shelter is clearly visible at the top of the hill 400 feet away, as a large disk-like object, which seems to dominate the view. This shelter is constructed like the other two, approximately 9 feet high, 32 feet across, with 6 round steel pipes supporting the circular flat, gravel roof.

This shelter was constructed in the open area at the top of the battlefield and looks down upon the battlefield below. This location provides an ideal place to gain a basic understanding of the events that unfolded here and to see an overview of much of the battlefield.

This is the first stop along the park's recommended tour route, and is designated as an 'Overlook' on the park brochure map. This is also the first stop during formal interpretive walks given by the Park Rangers. When staffing levels permit, Rangers are assigned to rove the battlefield in order to meet visitors that do not come into the Visitor Center and who would otherwise not have contact with



Cotton-patch Hill Shelter - View from Parking Lot  
Figure 2



Cotton-patch Hill Shelter - Close-up View  
Figure 3

park staff. This shelter, as well as the Gun Hill Shelter are often used as staging areas for those roving contacts.

One flat panel interpretive wayside exhibit is positioned under the shelter to explain the overview of the history that occurred here to park visitors. Two wooden benches with steel legs are also located under the shelter and are a welcome resting place to many who climb the hill for the view, or to listen to a park ranger's discussion.

The shelter meets the objective of offering visitors protection from the summer sun, but tends to dominate the landscape and detracts from the battlefield itself. The size, circular design and position of the shelter in the open field all collaborate to create an artifact that grabs your attention, rather than allowing the topography of the landscape and the story to dominate.

### Gun Hill Shelter

The second shelter is located at the base of Gun Hill. Gun Hill is the name given to the small knoll where General Andrew Jackson placed his two cannon to bombard the Creeks' log barricade. In 1914, the United States Congress ordered a monument be placed on top of the hill to honor General Andrew Jackson and his men. That monument stands today, accompanied by a full size reproduction cannon, with the distinctive sky-blue color of American cannons of the late 1700's and early 1800's.



Gun Hill Shelter - View from Parking Lot  
Figure 4



Gun Hill Shelter - View from Congressional Monument  
Figure 5

This shelter, like the first, is plainly seen from both the road and the corresponding parking lot. This shelter is only 250 feet from the parking lot, but more critically, it is positioned so that it lies directly between the top of the hill and the barricade location in the battlefield, marked by white posts. The shelter houses two interpretive wayside exhibits which help the visitor understand the significance of the landscape, river and barricade in the Creek's defensive plan and Jackson's plan of attack.



This shelter meets the objective of offering visitors protection from the summer sun, but it too tends to dominate the landscape and detract from the battlefield itself. The shelter's distinctive round shape as well as its size when seen from such a close distance combine to make the shelter a focus of attention, rather than a subdued addition to the landscape.

Furthermore, the shelter's placement directly between the Congressional Monument and the barricade position especially detracts from the historical landscape. Visitors who climb the paved path to the top of the hill find it almost impossible to view or photograph the location of the barricade from alongside the Monument or cannon, without also viewing the roof of the shelter.

### **Tohopeka Village Overlook Shelter**

The third shelter is at the Tohopeka Village Overlook. This shelter sits at the edge of the woods, on a hill overlooking the river flood plains where the temporary village once stood. The shelter is accessible by an improved trail from the adjacent parking area. The trail is part of the 3 mile long Nature Trail that surrounds the battlefield and passes all three shelters. This shelter is 400 feet from the parking lot, but can not be seen from there due to thick woods. The shelter can be seen from the Loop Tour Road on the southwest side of the village site, from a distance of approximately 1,100 feet.

This shelter is identical in size and appearance to the other two shelters, but is further from the road where it can be observed, and is nested along the edge of the woods, rather than positioned out in the battlefield. These features make the shelter less noticeable than the other two, although it is still plainly visible from the tour road, especially during the winter when the trees in the village site lose their leaves.

This shelter is at the farthest point from the trailhead, a distance of 1.1 trail miles, and it is 6/10 mile from the Gun Hill Shelter. This shelter houses an interpretive wayside exhibit explaining the significance of the village site, the high ground the shelter sits upon, and the influence of this topography on the Cherokee



Tohopeka Seen From Village Overlook Shelter  
And the Nature Trail  
Figure 6



Tohopeka Village Overlook Shelter  
As Seen From the Loop Tour Road  
Figure 7

attack on the village, as well as the eventual outcome of the battle.

Because this shelter is the furthest point from the trailhead, it also provides a welcome refuge from rain storms and summer lightning storms which sometimes catch hikers off guard.

#### **1.4 Issues Analyzed in the Environmental Assessment**

Issues and concerns affecting the proposed action were identified by National Park Service program specialists in the regional office, park staff, and through scoping meetings with interested members of the public (see Chapter 5), and through discussion with the State Historic Preservation Officer (SHPO). Impact topics are the resources of concern that could be affected by the range of alternatives. Specific impact topics were developed to ensure that alternatives were compared on the basis of the most relevant topics. The following impact topics were identified on the basis of federal laws, regulations, Director's Orders, and National Park Service *Management Policies* (2001). A brief rationale for the selection of each impact topic is given below, and the following section discusses the rationale for dismissing specific topics from further consideration.

#### **Impact Topics Analyzed in This Environmental Assessment/Assessment of Effect**

##### **Geology, Topography and Soils**

In accordance with the National Park Service's *Management Policies* (2001), the National Park Service will strive to understand and preserve the soil resources of park units and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.

The park is located along the southern boundary of the Northern Piedmont Upland physiographic region<sup>3</sup> and consists of metamorphic and igneous rocks of Paleozoic to Precambrian age. The granite, gneiss, and schist bedrock weather to produce well-drained reddish loamy or clayey soils<sup>4</sup>. The elevation ranges from 535 feet along the river to 680 feet at the higher ridgelines. The topography is relatively flat along the river floodplain, with low rolling hills throughout much of the park. Slopes may reach 30 percent in some areas, but are more commonly 10 to 14 percent.

Since this proposed action may have measurable impacts on topography and soils, if any alternative except the 'no action' alternative is selected, Geology, Topography and Soils will be addressed as an impact topic.

##### **Cultural and Ethnographic Resources**

Section 106 of the *National Historic Preservation Act* of 1966 provides the framework for federal review and protection of cultural resources, and ensures their consideration during federal project planning and execution. The Horseshoe Bend National Military Park in its entirety is listed in the National Register of Historic Places.

Ethnographic resources are defined by the National Park Service as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or

other significance in the cultural system of a group traditionally associated with it" (*Director's Order # 28, Cultural Resource Management Guideline, 191*). American Indian tribes traditionally associated with the lands of Horseshoe Bend National Military Park, and others with whom park staff regularly confer, were apprised by letter of the proposed action on August 11, 2004.

This proposed action will result in ground disturbance if any alternative except the 'no action' alternative is selected, which increases the possibility that ethnographic resources may be uncovered. Since most of the ground disturbance is proposed to take place on previously disturbed ground, and since all artifacts discovered on the battlefield to date do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

If an alternative is selected (including the preferred alternative) which will result in the disturbance of previously undisturbed ground, that ground will be carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of previously undisturbed ground. It should be noted that the grounds surrounding the Cotton-patch Hill and Gun Hill shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items<sup>5</sup>.

A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at the site would be stopped and the affiliated Tribes immediately contacted.

Since this proposed action will result in ground disturbance if any alternative except the 'no action' alternative is selected, and the potential to uncover artifacts does exist, Cultural and Ethnographic Resources will be addressed as an impact topic.

### **Archeological and Historic Resources**

Horseshoe Bend National Military Park is listed, in its entirety, in the National Register of Historic Places. The NPS is constrained in any activity which would result in a moderate or greater adverse effect to National Register eligibility. Alternatives examined in this E.A. will not be selected if it is determined that they would result in a moderate or greater adverse effect to National Register eligibility.

As stated above, in the section *Cultural and Ethnographic Resources*, this proposed action will result in ground disturbance if any alternative except the 'no action' alternative is selected. This increases the possibility that historical artifacts may be uncovered, however, most of the ground disturbance is proposed to take place on previously disturbed ground.

Any undisturbed ground which would be disturbed from implementation of one of the action alternatives would be carefully surveyed by an NPS archeologist prior to any work, and an NPS

archeologist would be on site during the excavation of previously undisturbed ground. It should be noted that the grounds surrounding the Cotton-patch Hill and Gun Hill shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items.

Since this proposed action will result in ground disturbance if any alternative except the 'no action' alternative is selected, and the potential to uncover artifacts does exist, Archeological and Historic Resources will be addressed as an impact topic.

### **Cultural Landscapes**

According to the National Park Service's *Cultural Resource Management Guideline (DO-28)*, a cultural landscape is:

...a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions<sup>6</sup>.

Thus, cultural landscapes are the result of the long interaction between man and the land, the influence of human beliefs and actions over time upon the natural landscape. Shaped through time by historical land-use management practices, as well as politics and property laws, levels of technology, and economic conditions, cultural landscapes provide a living record of an area's past, a visual chronicle of its history. The dynamic nature of modern human life, however, contributes to the continual reshaping of cultural landscapes; making them a good source of information about specific times and places, but at the same time rendering their long-term preservation a challenge.

Today's battlefield landscape consists of a large grass clearing maintained by mowing, surrounded by a tall mixed hardwood and pine forest. This landscape is probably similar to the landscape found by American army forces in 1814, although it is certainly not exactly the same. At that time, stumps probably littered the battlefield, where recently downed trees were used in the construction of the barricade and other defenses. We do not know how wide the clearing was, or how far it extended in front of or behind the barricade. Today's cleared grassland is probably larger than the clearing of 1814, just as the forest is undoubtedly denser than that of 1814.

This proposed action may have measurable impacts on the cultural landscape, if any alternative except the 'no action' alternative is selected, so Cultural Landscapes will be addressed as an impact topic.

### **Visitor Experience (includes public use conflicts)**

Horseshoe Bend National Military Park is open year round except Thanksgiving, Christmas, and New Year's days. The park averages about 109,000 visitors annually, and peak visitation occurs in the spring and fall. Visitation is heaviest during the spring and fall, with weekend visitation

usually higher than weekday. The principle visitor activities are driving the battlefield tour road, hiking the nature trail, visiting the museum/visitor center, viewing the interpretive film, picnicking, and water related activities on the river. The average length of stay is less than 2 hours.

If any alternative except the 'no action' alternative is selected, this action will impact visitor experience on both a short term and long term basis, and will be addressed as an impact topic in this E.A.

## **1.5 Issues Eliminated from Further Analysis**

### **Water Resources (Water Quality, Wetlands, and Floodplains)**

Park Service policies require protection of water quality consistent with the Clean Water Act. Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to prohibit or regulate, through a permitting process, discharge of dredged or fill material or excavation within U.S. waters.

The Tallapoosa River runs through the middle of Horseshoe Bend National Military Park. The Creek Indians selected this site because of the defensible nature of the horseshoe bend in the fast flowing, steep banked river. The proposed action would take place well above the river and away from any streams which empty into the river. The closest shelter to the river is the Gun Hill shelter, which is approximately 560 feet from the river bank. Construction activities would result in little if any eroded soils reaching any streams so impacts to water quality will be negligible.

Executive Order 11990, *Protection of Wetlands*, requires federal agencies to avoid, where possible, adversely impacting wetlands. Proposed actions that have the potential to adversely impact wetlands must be addressed in a Statement of Findings. This proposed action would not take place on or near wetlands and would not result in any impacts to wetlands. A Statement of Findings for wetlands will not be prepared.

Executive Order 11988, *Floodplain Management*, requires all federal agencies avoid construction within the 100-year floodplain unless no other practicable alternative exists. Certain construction within a 100-year floodplain requires preparation of a Statement of Findings. This proposal is outside the 100-year floodplain and a Statement of Findings for floodplains will not be prepared.

Because the proposed action would have negligible impacts on water quality and there would be no impacts to either wetlands or floodplains, Water Resources was dismissed as an impact topic.

### **Wildlife and Wildlife Habitat**

A variety of wildlife resources inhabit the forests and grasslands of Horseshoe Bend National Military Park. All of these species are typical to the southern Piedmont region, including ungulates, small mammals, birds, reptiles, amphibians, and invertebrates. Some common species include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*) red fox (*Vulpes vulpes*), eastern cottontail (*Sylvilagus floridanus*), raccoon (*Procyon lotor*), opossum (*Didelphis*

*virginiana*), armadillo (*Dasypus bellus*), quail (*Coturnix coturnix japonica*), and turkey (*Meleagris gallopavo*)<sup>7</sup>. The park also provides habitat for a wide variety of birds.

The potential for any wildlife impacts from any of the possible alternatives is very slight. One alternative includes modifying a tree line to provide screening to a shelter. This alternative would convert approximately 1/2 acre of mowed grassland to forest. This amount of converted land in the 2040 acre park is so small as to have a negligible effect on wildlife or habitat.

Other alternatives includes relocating shelters a short distance away and constructing smaller shelters at the edge of the woods. The footprint of these activities is extremely small, and would have a negligible impact on wildlife and wildlife habitat.

Because the alternatives for this proposed action show no more than a negligible impact on wildlife or wildlife habitat, this impact topic will be eliminated from further analysis.

## Vegetation

In many portions of Horseshoe Bend National Military Park, shortleaf pine and loblolly pine have displaced the mixed longleaf pine/hardwood forest that existed in 1814. However, most of the plant species are indigenous to this region.

Hardwood trees in the area are represented by white oak (*Quercus alba*), southern red oak (*Quercus falcata*), black oak (*Quercus velutina*), and bitternut hickory (*Carya cordiformis*). Other common overstory trees are southern sugar maple (*Acer barbatum*), basswood (*Tilia americana*), and northern red oak (*Quercus rubra*). Southern pine beetle infestations exist in numerous pockets of the park. In some cases, infestations are near park boundaries and endanger adjacent commercial forests.

Understory and shrub species are represented by dogwood (*Cornus florida*), redbud (*Cercis canadensis*), pawpaw (*Asimina triloba*), sassafras (*Sassafras albidum*), and oak-leaved hydrangea (*Hydrangea quercifolia*). The common herbaceous species are Christmas fern (*Polystichum acrostichoides*), rattlesnake fern (*Botrychium virginianum*), and bedstraw (*Galium aparine*).

Exotic plant species have impacted many areas within the park. Invading exotic plants such as ailanthus (*Altissima*), mimosa (*Albizia julibrissin*), Chinaberry (*Melia azedarach*), Japanese honeysuckle (*Lonicera japonica*), kudzu (*Pueraria lobata*), and sandburs (*Cenchrus longispinus*) continue to expand and invade new areas. Some of these invasive plants, such as kudzu and honeysuckle, can serve as ladder fuels and increase fire danger.

Removing the existing shelters and rebuilding new shelters would have an extremely limited impact on vegetation. The greatest adverse impact to vegetation would be one alternative's proposal to cut a small number of trees at two locations in order to construct replacement shelters in two new locations. Approximately ten small diameter hardwood trees would be removed under this alternative.



Another alternative calls for planting additional trees in order to advance the tree line closer to one of the shelters, to enhance the screening effect. This expanded tree line involves an area of approximately ½ acre in size.

None of the alternatives have any substantial impact on vegetation within the park, and Vegetation was dismissed as an impact topic.

### **Threatened, Endangered or Special Concern Species**

The *Endangered Species Act (1973)* requires an examination of impacts on all federally-listed threatened or endangered species. National Park Service policy also requires examination of the impacts on federal candidate species, as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species.

There are no threatened, endangered or special concern species known or suspected of inhabiting Horseshoe Bend National Military Park. Three species of freshwater mussel: the fine-lined pocketbook (*Lampsilis altilis*), the southern clubshell (*Pleurobema decisum*), and the ovate clubshell (*Pleurobema perovatum*) have historically been recorded from the Chewacla, Uphabee and Opintlocco Creeks in the Tallapoosa drainage<sup>8</sup>, however, they are not believed to inhabit any area within the park. Qualitative research by park staff, which included a study of the historic range of these species and discussions with the U.S. Fish and Wildlife Service, has determined that the three species of mussels are almost certainly not present in the river drainages within or near the park.

Furthermore, because the proposed action would have negligible impacts on water quality, it is highly unlikely that any aquatic species present in the park would be effected. Because no threatened, endangered or special concern species are known or suspected of inhabiting the park, and the proposed action would have negligible impacts on water quality, this impact topic will be eliminated from further analysis.

### **Air Quality**

Section 118 of the 1963 *Clean Air Act* (42 U.S.C. 7401 et seq.) requires a park unit to meet all federal, state, and local air pollution standards. Horseshoe Bend National Military Park is designated a Class II air quality area under the Clean Air Act, as amended. A Class II designation indicates the maximum allowable increase in concentrations of pollutants over baseline concentrations of sulfur dioxide and particulate matter as specified in Section 163 of the Clean Air Act. Further, the Clean Air Act provides that the federal land manager has an affirmative responsibility to protect air quality related values (including visibility, plants, animals, water quality, cultural resources, and visitor health) from adverse pollution impacts.

All alternatives, except the no-action alternative involve hauling material, operating equipment, and other construction activities, resulting in temporarily increased vehicle exhaust and emissions. However, hydrocarbons, NO<sub>2</sub>, and SO<sub>2</sub> emissions, as well as any airborne particulates would be rapidly dissipated by normal air movements. Overall, there could be a negligible degradation of local air quality; however, such effects would be temporary, lasting only as long as construction. The park's Class II air quality would not be affected by the proposal. Therefore, air quality was dismissed as an impact topic.

## **Lightscape**

In accordance with National Park Service *Management Policies* (2001), the National Park Service strives to preserve natural ambient lightscales, which are natural resources and values that exist in the absence of human caused light. Horseshoe Bend National Military Park strives to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements, and to ensure that all outdoor lighting is shielded to the maximum extent possible to keep light on the intended subject and out of the night sky. The proposed action could require artificial lighting if portions of construction occur at night. This lighting would be restricted to the project areas and would be limited to the actual construction time. This extremely limited lighting provides a negligible impact, and therefore, Lightscape Management was dismissed as an impact topic.

## **Soundscape**

In accordance with National Park Service *Management Policies* (2001) and Director's Order #47, *Sound Preservation and Noise Management*, an important part of the National Park Service mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in a park, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials.

The frequencies, magnitudes, and duration of human-caused sound considered acceptable varies among National Park Service units, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas. Normal operations within the park require mowing the large areas of grass with tractors. These and other park operation activities routinely impact the park's soundscape.

Removing existing shelters, hauling material, building new shelters, operating equipment, and other construction activities could result in dissonant, human-caused sounds. However, any dissonant sounds associated with construction would be temporary, lasting only as long as the construction activity generating the sound, and would negligibly impact visitor enjoyment of the park. Because these activities would have short-term and negligible impacts on visitor enjoyment, Soundscape Management was dismissed as an impact topic.

## **Indian Trust Resources**

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources in Horseshoe Bend National Military Park. The lands comprising the park are not held in trust by the Secretary of the Interior for the benefit of Indians

due to their status as Indians. Therefore, Indian Trust Resources was dismissed as an impact topic.

### **Park Operations**

The three shelters being considered in this proposed action are located on the battlefield, away from the Visitor Center and headquarters complex. Park management operations would not be effected by this action. Public education and interpretive activities would be effected while the construction activities occur, due to the inability to use a particular shelter during the construction phase. Park maintenance activities would be minimally effected as the Chief of Maintenance would be required to provide oversight to the project and mowing and other routine activities might be minimally effected. These effects are very minimal in nature, and are short term, only occurring during the length of the project. For these reasons, Park Operations was dismissed as an impact topic.

### **Museum Collections**

The National Park Service's *Management Policies (2001)* and Director's Order #28, *Cultural Resource Management Guideline (1997)* require the consideration of impacts on museum collections (historic artifacts, natural specimens, and archival and manuscript material). There are 38,222 items currently accessed into the Horseshoe Bend collection, but only 1,196 of these items are on site. Those items are in exhibit or storage at the park Visitor Center. The alternatives proposed in this action will have no effect on the Visitor Center or existing museum collection.

Since this proposed action would result in ground disturbance if any alternative except the 'no action' alternative is selected, there is a possibility of discovering additional artifacts which would be accessed into the museum collection. However, most of the ground disturbance is proposed to take place on previously disturbed ground, and most of the grounds surrounding the shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology.

These facts make it unlikely that any significant artifact would be uncovered by this action. It is possible that objects such as musket balls, grape shot, projectile points, broken weaponry, or similar items may be found, but the discovery and accession of these types of items into the museum collection would have negligible impacts on the collection. For these reasons, Museum Collections was dismissed as an impact topic.

### **Public Health and Safety**

The National Park Service's *Management Policies (2001)* and Director's Order #50-C, *Public Risk Management Program*, require the consideration of safety concerns and risk management in the planning and design of park facilities. The NPS will strive to locate, design, build, operate and maintain facilities so as to minimize natural and man-made hazards.

The alternatives in this proposed action do not materially change current public safety concerns. The 'no action' alternative would not change the current shelter design, and the other alternatives would result in shelters with similar design characteristics. Both the current shelters and the proposed design include roofed facilities, with benches at knee-height and support poles. The

primary design differences are that the proposed design is much smaller and calls for bench-height stone walls around 3 sides of the structures. Both the current and proposed designs call for a flat, level, paved or concrete floor and interpretive wayside exhibits.

All alternatives exhibit similar risk characteristics, and thus Public Health and Safety was dismissed as an impact topic.

### **Socioeconomic Impacts**

The proposed action would neither change local and regional land use nor appreciably impact local businesses or other agencies. Implementation of the proposed action could provide a negligible beneficial impact to the economies of nearby Alexander City or Dadeville (e.g. minimal increases in employment opportunities for the construction workforce and revenues for local businesses generated from construction activities and workers). Any increase, however, would be temporary and negligible, lasting only as long as construction. Therefore, Socioeconomic Impacts was dismissed as an impact topic.

### **Environmental Justice / Protection of Children**

Environmental justice is defined by the Environmental Protection Agency as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Presidential Executive Order 12898 requires federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionate impacts of their programs, policies and activities on minority and low-income populations and communities. Executive Order 13045 requires Federal actions and policies to identify and address disproportionately adverse risks to children's health and safety of children. None of the alternatives identified in this proposed action would have disproportionate health or environmental effects on children or to minorities or low-income populations as defined in the Environmental Protection Agency's Environmental Justice Guidance; therefore, this topic was dismissed as an impact topic.

### **Resource Conservation, Including Energy, and Pollution Prevention**

This action does not materially affect energy use. Both the current shelters and proposed design require no air conditioning/heating, lighting, or other energy use. Any alternative selected other than the 'no action' alternative would require the construction of new shelters, but the long term energy consumption and pollution resulting from that activity is negligible. Since these effects are minimal in nature, Resource Conservation was dismissed as an impact topic.

### **Prime and Unique Agricultural Lands**

In 1980, the Council on Environmental Quality directed that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's

Natural Resource Conservation Service as prime or unique. Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Unique land is land other than prime farmland that is used for production of specific high-value food and fiber crops.

Since there are no prime and unique agricultural lands present in the park, Prime and Unique Agricultural Lands was dismissed as an impact topic.

### **Wilderness**

NPS *Management Policies (2001)* requires that actions having the potential to impact wilderness resources must be evaluated in accordance with NPS procedures for implementing *the National Environmental Policy Act*. Since there are no proposed or designated wilderness areas within or adjacent to the park, Wilderness impacts are not further evaluated in this EA.

**Impact Topics Considered in the Environmental Assessment**

<b>Impact Topic</b>	<b>Retained or Dismissed from Further Evaluation</b>	<b>Relevant Regulations or Policies</b>
Geology, Topography and Soils	Retained	NPS <i>Management Policies 2001</i>
Water Resources	Dismissed	Clean Water Act; Executive Orders 12088, 11988, & 11990; Rivers and Harbors Act; Clean Water Act; NPS <i>Management Policies</i> ; Director's Order 77-1
Wildlife and Wildlife Habitat	Dismissed	NPS <i>Management Policies</i>
Vegetation	Dismissed	NPS <i>Management Policies</i>
Threatened, Endangered or Special Concern Species	Dismissed	Endangered Species Act; NPS <i>Management Policies</i>
Air Quality	Dismissed	Federal Clean Air Act (CAA); CAA Amendments of 1990; NPS <i>Management Policies</i>
Lightscares	Dismissed	NPS <i>Management Policies</i>
Soundscapes	Dismissed	NPS <i>Management Policies</i>
Cultural and Ethnographic Resources	Retained	National Historic Preservation Act; NEPA; 36 CFR 800; NPS <i>Management Policies</i> ; Director's Order 28
Archeological and Historic Resources	Retained	National Historic Preservation Act; NEPA; 36 CFR 800; NPS <i>Management Policies</i> ; Director's Order 28
Cultural Landscapes	Retained	National Historic Preservation Act; NEPA; 36 CFR 800; NPS <i>Management Policies</i> ; Director's Order 28
Indian Trust Resources	Dismissed	Department of the Interior Secretarial Orders No. 3206 and No. 3175
Visitor Experience	Retained	NPS <i>Management Policies</i>
Park Operations	Dismissed	NPS <i>Management Policies</i>
Museum Collections	Dismissed	NPS <i>Management Policies</i>
Public Health and Safety	Dismissed	NPS <i>Management Policies</i>
Socioeconomic Impacts	Dismissed	40 CFR Regulations for Implementing NEPA; NPS <i>Management Policies</i>
Environmental Justice	Dismissed	Executive Orders 12898 and 13045
Resource Conservation, Including Energy, and Pollution Prevention	Dismissed	NEPA; NPS <i>Guiding Principles of Sustainable Design</i> ; NPS <i>Management Policies</i>
Prime and Unique Agricultural Lands	Dismissed	Council on Environmental Quality 1980 memorandum on prime and unique farmlands
Wilderness	Dismissed	The Wilderness Act; Director's Order #41; NPS <i>Management Policies</i>

Impact Topics  
Table 2

## 2.0 ALTERNATIVES

### 2.1 Alternative 1 - No Action

Under the 'no action' alternative, the three shelters would be maintained in their current location, with no modifications to their size, design, physical characteristics or use. They would continue to provide cover to the public during hot summer days and during thunderstorms and lightning.

Visitors would continue to see the shelters from the roads and parking lots, and the shelters would continue to be clearly perceptible human structures placed upon the landscape. The view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines would continue to be dominated by the sight of the shelters, which tend to stand out on the landscape and detract from the battlefield itself.

The shelters would continue to require routine maintenance including painting the wooden roofing support material and the iron framing as well as maintaining the gravel roof.

This alternative would not provide any constructive benefits to minimize the visual impact of structures on the cultural landscape, which is one of the objectives of this proposed action. This alternative does provide for a larger shelter than the other alternatives, and may provide greater protection from blowing rain. This alternative meets the second objective of providing appropriate cover to park visitors from the heat of the summer sun, thunderstorms and lightning.

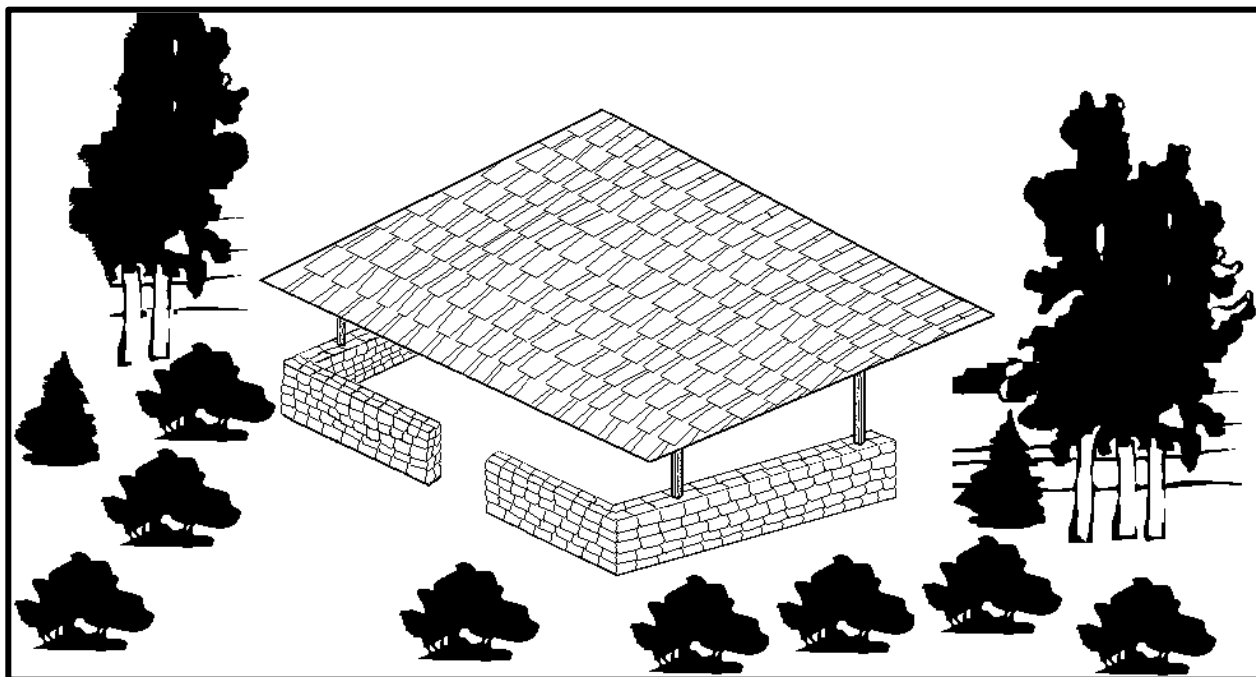
### 2.2 Alternative 2 - Replace in Place

This alternative proposes to replace the three existing 32 foot diameter circular shelters with smaller stone and wood shelters. The replacement shelters are proposed to be built in a design that evokes the image of an Indian lean-to, with low stone walls and the roof higher in the front than in the back. The shelters would also be somewhat wider in the front than in the back, to suggest the panoramic view available from the shelter. (See the conceptual drawing on the following page. )

The replacement shelters' walls would be low, only 2 feet high, constructed of tan stone, which would delineate the back and sides. The walls would also serve as benches, to accompany the two stone benches inside the shelters. The sloped roof of the shelters are proposed to be covered with a recycled-product artificial wooden shake. This product is based on recycled rubber and plastics, is practically maintenance free, has a 50 year life span, and looks very much like real wood shake. The overall effect would be of a small lean-to or open hut constructed of earthen materials.

The replacement shelters would be approximately 16 feet deep, 24 feet in width and 9½ feet tall at the front opening, with a 7 foot high roof at the back. This design is much smaller than the existing circular shelters now in place. Additionally, the narrowest side of the shelter is the side facing the road, reducing the visible silhouette to 16 feet, instead of the current 32 feet.

The three existing shelters would be taken apart on site and removed from the park. The large circular paved pads under the shelters would be dug up and removed. Crushed gravel, grassy pavers, or a similar porous material would be placed under the replacement shelters. Clean fill dirt and sod would replenish the area where pavement was removed outside the footprint of the new shelters. This project would entail driving trucks to each site for the dismantling and removal. A small crane may be required to remove the roof from each shelter.



Replacement Shelter - Conceptual Drawing  
Figure 8

Construction of the replacement shelters would also require that equipment and supplies be brought to the sites by truck. The paved trails will require patchwork where damaged during removal or construction operations.

### **Cotton-patch Hill and Gun Hill Shelters**

Both of these shelters would be replaced as described above. Equipment can access the Cotton-patch Hill and Gun Hill shelters easily, by driving over grass.

### **Tohopeka Village Overlook Shelter**

The Tohopeka Overlook shelter would be replaced as described above. Access to this shelter requires driving along the improved hiking trail from the adjacent parking area. This is a 4 feet wide paved trail that runs through the woods, so vehicles would impact vegetation on each side of the pavement. This damage to vegetation would be unsightly until it grows back during the following growing season.

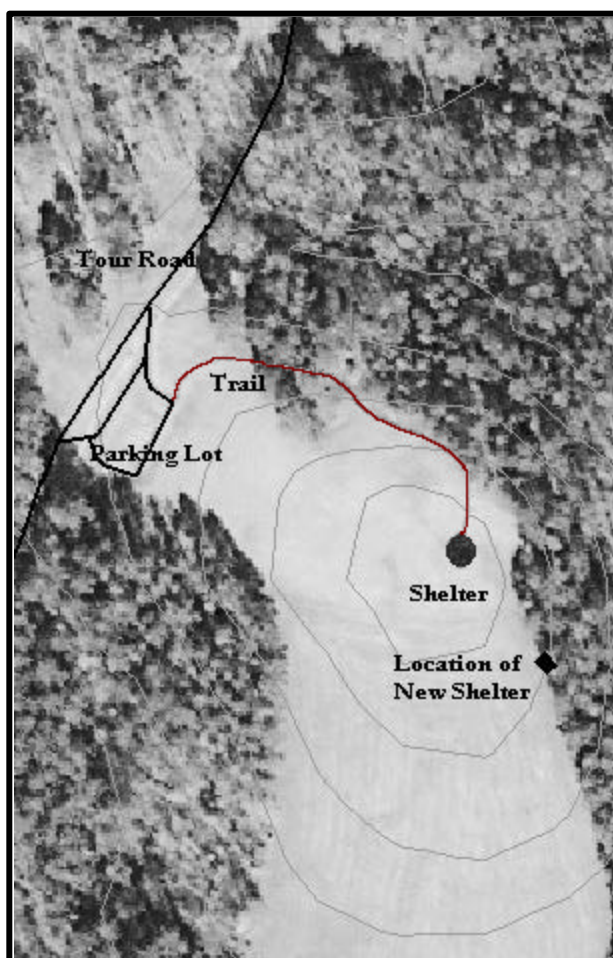


### 2.3 Alternative 3 - Relocate and Replace

This alternative proposes to move two of the three shelters in order to make them less visible from the road or parking lots. The new shelters would be constructed as described in Alternative 1, replacing the three existing 32 foot diameter circular shelters with small lean-to or hut-like shelters that evokes the image of an Indian lean-to, with low stone walls and the roof higher in the front than in the back. These would be 16 feet deep, 24 feet in width and 9½ feet tall at the front opening, with a 7 foot high roof at the back. The walls would be only 2 feet high, constructed of tan stone, which would delineate the back and sides. The sloped roof of the shelters would be covered with a recycled-product artificial wooden shake.

#### Cotton-patch Hill Shelter

The Cotton-patch Hill shelter would be relocated approximately 200 feet over the top of the hill, away from the parking lot and road. The shelter would be constructed in a small clearing cut into the existing tree line. The shelter would not be visible at all from the parking lot or road, and would blend into the tree line when viewed from Gun Hill or other parts of the battlefield. This relocation would greatly reduce the visual intrusion of the shelter on the battlefield.



Cotton-patch Hill Shelter - Relocation Map  
Figure 9

This location is fairly level, but will need a minimal amount of leveling in preparation of the shelter construction. Although this area was extensively farmed during the 100 year period prior to the park being established, the park will have the site carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of the site.

It should be noted that the grounds surrounding the Cotton-patch Hill and Gun Hill shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. Both of these sites were farmed during the 100 year period prior to establishment of the park.

To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at this site would be stopped and the affiliated Tribes immediately contacted.

This relocation would also require the addition of approximately 230 feet of paved hiking trail from the current location to the new location.

### **Gun Hill Shelter**

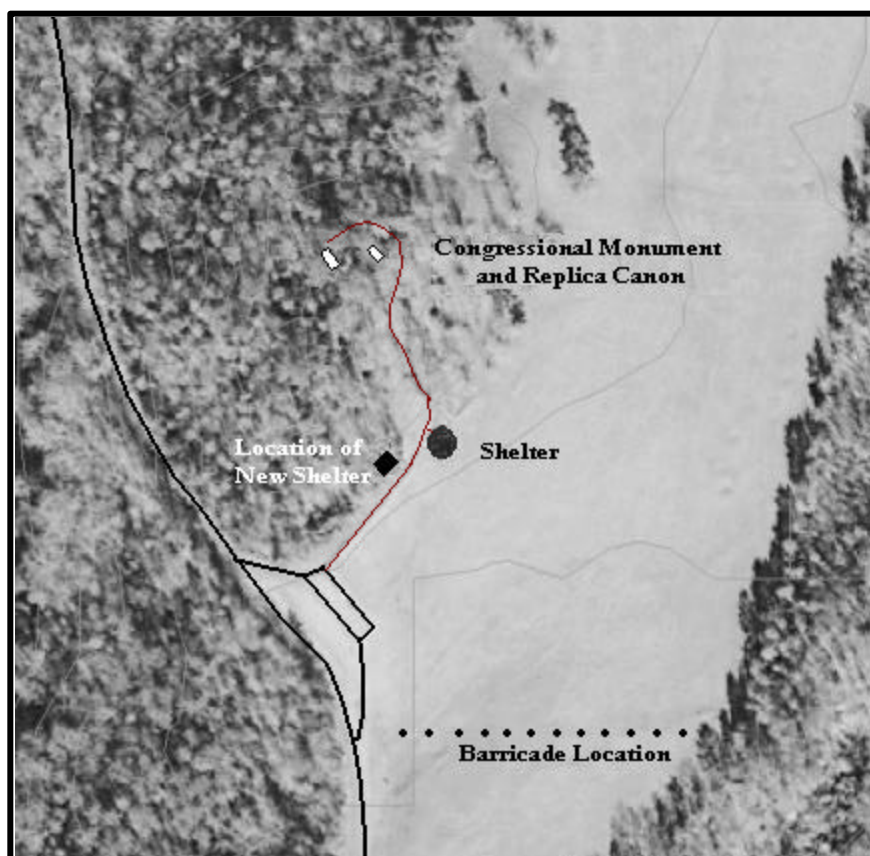
The Gun Hill shelter would be relocated approximately 60 feet closer to the road and parking lot, but it would be tucked into the edge of the woods, similar to the first shelter. Although this location is closer to the road and parking area, removing it from the battlefield will greatly reduce the visual impact of the shelter. The small lean-to or open hut design of earthen materials will also help the shelter be less conspicuous. Due to the topography and physical characteristics of the site, this placement provides the best location to achieve the following results:

- reduce it's visual impact by placing the shelter along the edge of the woods;
- places the shelter in a location that is not between the Monument and cannon on top of the hill, and the barricade position at the bottom of the hill;
- and places the shelter so both the approach route of the American army can be seen and the barricade location can be seen.

The topographical features of the site and the three objective listed above drive the location selected, as shown on the following page.

Placing the shelter in this location will require a small amount of excavation of the new site at the bottom of Gun Hill. The proposed shelters have a base of 12 feet deep and 18 feet in width, requiring approximately 14 feet by 22 feet of ground at the bottom of the hill to be leveled. This site will be carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of the site.

It should be noted that the grounds surrounding the Cotton-patch Hill and Gun Hill shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. Both the Gun Hill site and the Cotton-patch Hill site were farmed during the 100 year period prior to the establishment of the park.



Gun Hill Shelter - Relocation Map  
Figure 10

To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at this site would be stopped and the affiliated Tribes immediately contacted.

### Tohopeka Village Overlook Shelter

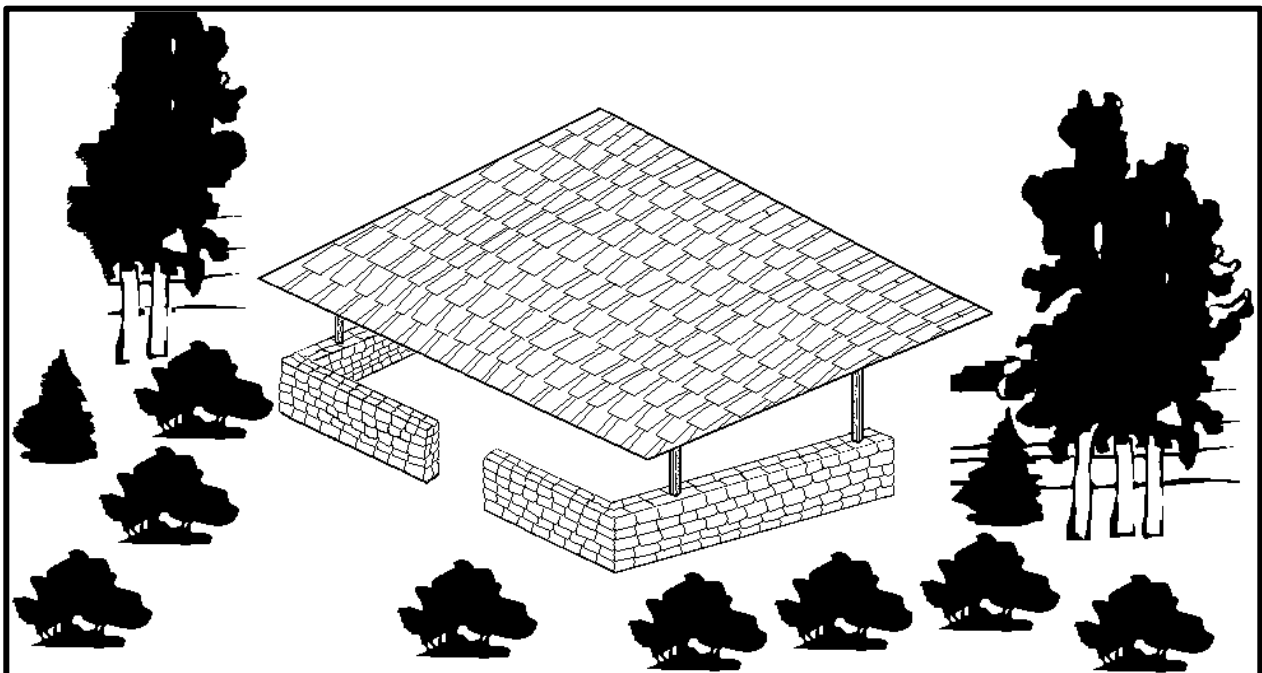
This shelter would be replaced in its current location. This seems to be the most appropriate location for a shelter, in regards to viewing the village site and access from the existing trail. The park does not see any potential gains in relocating this shelter.

Access to the shelter requires driving along the improved hiking trail from the adjacent parking area. This is a 4 foot wide paved trail that runs through the woods, so vehicles would impact vegetation on each side of the pavement. This damage to vegetation would be unsightly until it grows back during the following growing season.

### 2.4 Alternative 4 - Preferred Alternative

This alternative was developed by incorporating portions of alternative two and three above, and adding a third component: modifying an existing tree line to better shield one of the shelters from the road.

The new shelters would be constructed as described in Alternative 1: replace the three existing 32 foot diameter circular shelters with smaller stone and wood shelters. The replacement shelters are proposed to be built in a design that evokes the image of an Indian lean-to, with low stone walls and the roof higher in the front than in the back. The shelters would also be somewhat wider in the front than in the back, to suggest the panoramic view available from the shelter.



Replacement Shelter - Conceptual Drawing

Figure 11

The replacement shelters' walls would be low, only 2 feet high, constructed of tan stone, which would delineate the back and sides; the front would remain entirely open. The walls would also serve as benches, to accompany the two stone benches inside the shelters. The sloped roof of the shelters would be covered with a recycled-product artificial wooden shake. This product is based on recycled rubber and plastics, is practically maintenance free, has a 50 year life span, and looks very much like real wood shake.

The replacement shelters would be approximately 16 feet deep, 24 feet in width and 9½ feet tall at the front opening, with a 7 foot high roof at the back. This design is much smaller than the existing circular shelters now in place. The overall effect would be of a small lean-to or open hut constructed of earthen materials.

### **Cotton-patch Hill Shelter**

The Cotton-patch Hill shelter would be rebuilt at it's current location. This site is the best location to explain the approach route of the American army, as well as see the distant barricade location and the ground in between. This site offers an excellent view of much of the battlefield, presenting an opportunity to provide a general introduction.

Replacing the 32 foot circular shelter with the smaller shelter will reduce the visual impact to some degree, but the park is proposing to reduce that visual impact even more by modifying the tree line to bring the edge of the trees to the shelter, rather than move the shelter into the existing tree line. This alternative places the shelter at the point on the hill with the best view.

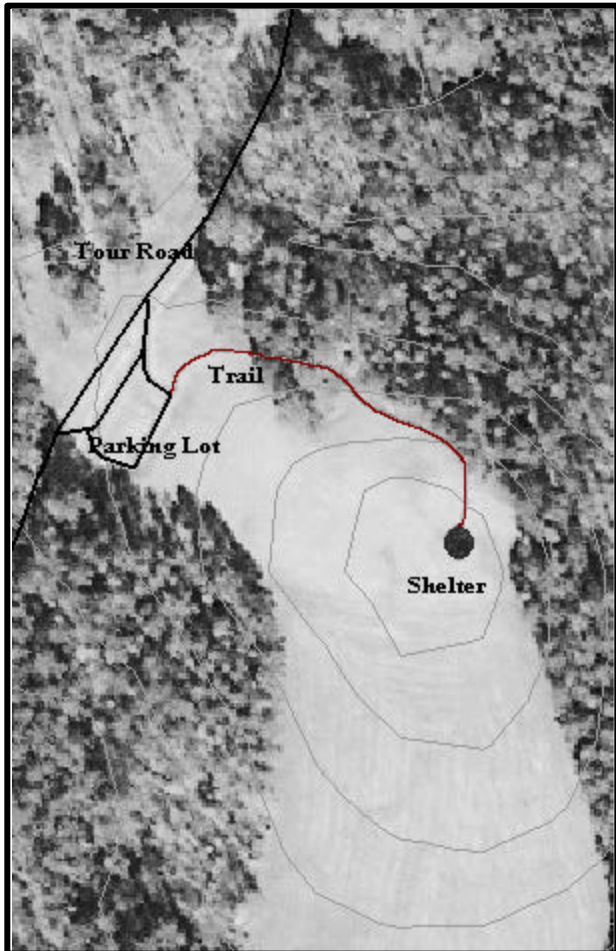
The park would develop the new tree line by planting selected native tree species such as oak, gum, beech, hickory, long leaf pine, holly, dogwood and others within the tree line expansion area, as indicated on the maps on the following page, and by allowing natural succession to bring other trees and other species into this area. The park recognizes that it will take several years to fully accomplish the screening desired, but this option is the most likely to accomplish the objectives of this action.

Screening during the first few years, accomplished by planted trees alone, will be helpful. This will be enhanced by the smaller size of the replacement shelter, and the placement of the new shelter so that it's side profile will be toward the road, giving it the smallest silhouette possible as seen from the road and parking area.

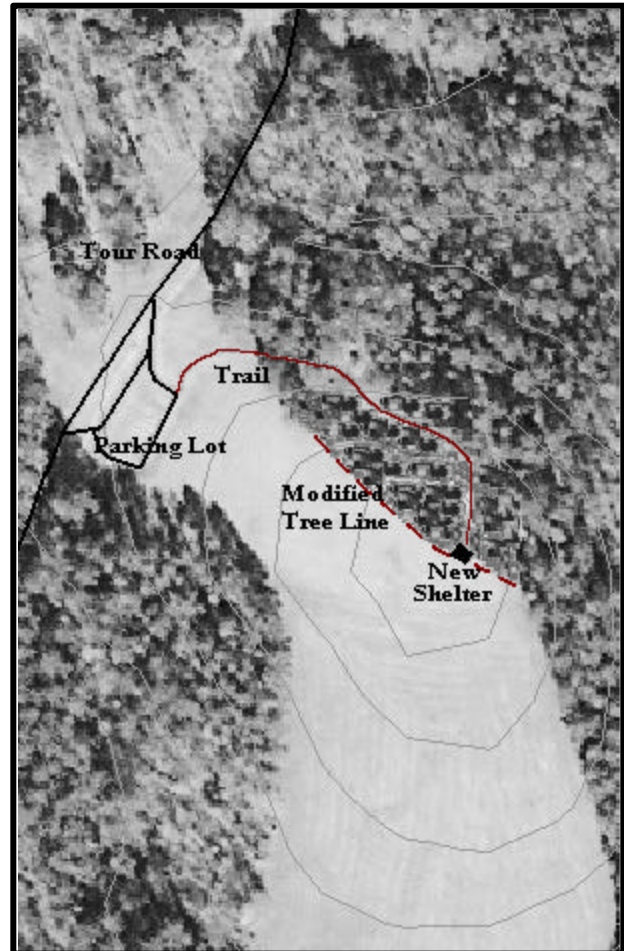
This tree line expansion area is approximately ½ acre in size and approximately 80 trees will be initially planted. The area will no longer be mowed and a forest understory will be allowed to build up.

The existing shelter would be taken apart on site and removed from the park. The large circular paved pad under the shelter would be dug up and removed. Crushed gravel, grassy pavers, or a similar porous material would be placed under the replacement shelter. Clean fill dirt and sod would replenish the area where pavement was removed outside the footprint of the new shelter. This project would entail driving trucks to the site for the dismantling and removal. A small crane may be required to remove the roof from the shelter.

Construction of the replacement shelter would also require that equipment and supplies be brought to the site by truck. The paved trail to the site may need patchwork if damaged during removal or construction operations.



Cotton-patch Hill Showing Contour Lines  
Figure 12



Cotton-patch Hill Showing Modified Tree Line  
Figure 13

No additional paved hiking trail will need to be installed. Mechanical equipment can access the shelter easily, by driving over grass.

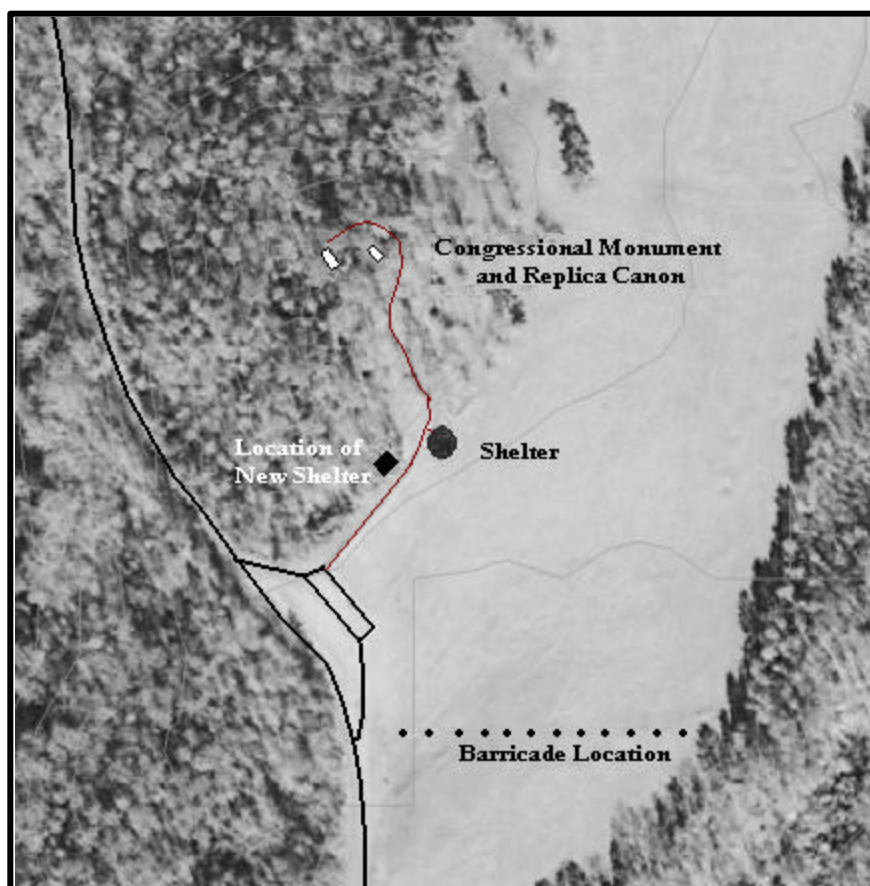
### Gun Hill Shelter

The Gun Hill shelter would be relocated approximately 60 feet closer to the road, as described in Alternative 3. This location would still be approximately 200 feet from the parking lot. The existing shelter would be dismantled and the replacement shelter would be tucked into the edge of the woods. Although this location is closer to the road and parking area, removing it from the battlefield will greatly reduce the visual impact of the shelter. The small lean-to or open hut design of earthen materials will also help the shelter be less conspicuous. Due to the topography



and physical characteristics of the site, this placement provides the best location to achieve the following results:

- reduce it's visual impact by placing the shelter along the edge of the woods;
- places the shelter in a location that is not between the Monument and cannon on top of the hill, and the barricade position at the bottom of the hill;
- and places the shelter so that both the approach route of the American army can be seen and the barricade location can be seen.



Gun Hill Shelter - Relocation Map  
Figure 14

Placing the shelter in this location will require a small amount of excavation of the new site at the bottom of Gun Hill. The proposed shelters have a base of 12 feet deep and 18 feet in width, requiring approximately 14 feet by 22 feet of ground at the bottom of the hill to be leveled. This site will be carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of the site.

It should be noted that the grounds surrounding the Cotton-patch Hill and Gun Hill shelters have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. This site, like

the Cotton-patch Hill site was farmed during the 100 year period prior to the establishment of the park.

To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at this site would be stopped and the affiliated Tribes immediately contacted.

The existing shelter would be taken apart on site and removed from the park. The large circular paved pad under the shelter would be dug up and removed. Crushed gravel, grassy pavers, or a similar porous material would be placed under the replacement shelter. Clean fill dirt and sod would replenish the area where pavement was removed outside the footprint of the new shelter. This project would entail driving trucks to the site for the dismantling and removal. A small crane may be required to remove the roof from the shelter.

Construction of the replacement shelters would also require that equipment and supplies be brought to the sites by truck. The paved trail to the site and the remaining paved pad may need patchwork, if damaged during removal or construction operations.

Mechanical equipment can access the shelter easily, by driving over grass.

### **Tohopeka Village Overlook Shelter**

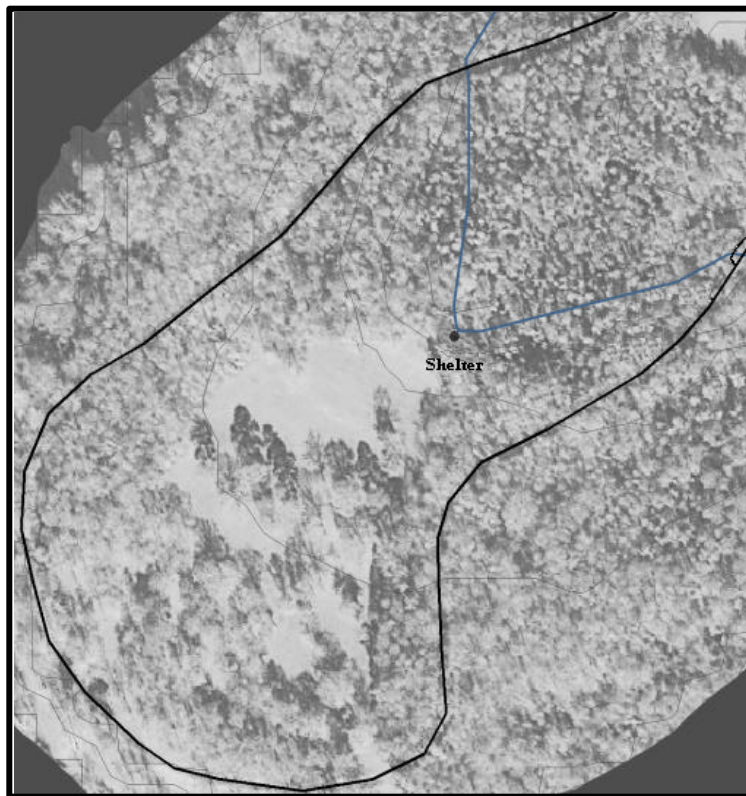
This shelter would be replaced in its current location, as shown on the following page, using the smaller replacement design. This location provides an excellent view of the village site and would not be moved.

Access to the shelter requires driving along the improved hiking trail from the adjacent parking area. This is a 4 feet wide paved trail that runs through the woods, so vehicles would impact vegetation on each side of the pavement. This damage to vegetation would be unsightly until it grows back during the following growing season.

Like the other shelters, this one would be taken apart on site and removed from the park. The large circular paved pad under the shelter would be cut to fit the smaller replacement shelter and the excess pavement dug up and removed. Clean fill dirt would be brought in to replenish the area where pavement was removed. This process would entail driving trucks to the site for the dismantling and removal. A small crane may be required to remove the roof from the shelter.

Construction of the replacement shelters would also require that equipment and supplies be brought to the sites by truck. The paved trail to the site and the remaining paved pad may need patchwork, if damaged during removal or construction operations.





Tohopeka Village Overlook Shelter Map  
Figure 15

## 2.5 Mitigation Measures of the Preferred Alternative

The proposed alternative would require specific mitigation activities in order to minimize impacts to both natural and cultural resources and ensure there will be no adverse effects to cultural, ethnographic, archeological and historic resources.

The preferred alternative would result in ground disturbance, thus increasing the possibility that cultural resources may be uncovered. Most of the ground disturbance is proposed to take place on previously disturbed ground, and since all artifacts discovered on the battlefield to date do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

However, the proposed Gun Hill site will be carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of the site.

A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at the site would be stopped and the affiliated Tribes immediately contacted.

Silt fences, hay bales or other erosion control devices will be used where needed to minimize erosion from rain runoff. Soils removed during excavation will be used to fill in around portions of paved pads removed from the current shelter sites. Equipment used will be staged in paved parking areas.

## 2.6 Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the Council on Environmental Quality (CEQ). The CEQ provides direction that “[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101...”<sup>9</sup>

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative 1, No Action, does not satisfy one of the principle goals of this action, which is to minimize the visual impact of structures on the cultural landscape. The No Action alternative leaves intact the existing shelters which intrude upon the cultural landscape. Although Alternative 1 requires no ground disturbance or modifications which affect the natural environment, and expends the least amount of time, energy, and funding, this alternative does not take advantage of the opportunity to better "preserve important historic, cultural and natural aspects of our national heritage...", as described in the evaluative factors above.

Alternative 2, Replace in Place, better accomplishes the objectives than Alternative 1, because it reduces the size of the visual impacts on the viewshed, but it still does not fully remove the shelters from the battlefield, and does not fully accomplish this action's objectives.

Alternative 3, Relocate and Replace, removes the existing shelters from the battlefield and reduces their size, thereby contributing to the park's desire to "preserve important historic, cultural and natural aspects of our national heritage...", as described in the evaluative factors above. This alternative requires a greater amount of paved trail than the other alternatives, and places one of the shelters in a location where it is more difficult to fully see the landscape which contributed to the events of the battle.

Alternative 4, the Preferred Alternative, is also the environmentally preferred alternative for this action because it better addresses the evaluative factors listed by Council on Environmental Quality. This alternative more fully fulfills "... the responsibilities of each generation as trustee of the environment for succeeding generations"; "assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings"; And this alternative is the most appropriate to "preserve important historic, cultural and natural aspects of our national heritage..".

Although this alternative impacts the natural environment, the impacts are minor in nature and are extremely localized. This alternative remedies a previous impact on the cultural landscape and current impacts to visitor use and experience, while balancing the impacts on the natural environment. This alternative also returns a small portion of a heavily managed lawn behind one of the existing shelters into a more natural wooded area.

### **3.0 Assessment of Effects on Cultural Resources and § 106 Compliance**

#### **3.1 Process of Assessment of Effects to Cultural Resources**

In this Environmental Assessment, impacts to cultural resources are described in terms of type, context, duration, and intensity, as described in Section 4 which follows, and which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). These impact analyses are intended to comply with the requirements of both NEPA and §106 of the National Historic Preservation Act (NHPA). In accordance with the Advisory Council on Historic Preservation's regulations implementing §106 of the NHPA (36 CFR Part 800, Protection of Historic Properties), impacts to cultural resources were identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that were either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the National Register; and (4) considering ways to avoid, minimize or mitigate adverse effects.

Under the Advisory Council's regulations, a determination of either adverse effect or no adverse effect must also be made for affected, National Register eligible cultural resources. An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the National Register, e.g. diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance or be cumulative (36 CFR Part 800.5, Assessment of Adverse Effects). A determination of no adverse effect may mean there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register.

CEQ regulations and the National Park Service's Conservation Planning, Environmental Impact Analysis and Decision-making (Director's Order #12) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g. reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by §106 is similarly reduced. Although adverse effects under §106 may be mitigated, the effect would remain adverse.

#### **3.2 Section 106 Summary**

A §106 summary of the potential effects of the preferred alternative is included in the impact analysis section of Section 4 of this document for:

- cultural and ethnographic resources;
- archeological and historic resources; and
- cultural landscapes.

Each of these summaries examine the potential effects of the alternative on those particular cultural resources categories. A finding of no adverse effect on each of these categories, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations, would mean there are no adverse effects caused by this undertaking on cultural resources.

## 4.0 Environmental Analysis

### 4.1 Methodology for Assessing Impacts

Potential impacts are described in terms of type (beneficial or adverse), context (site-specific, local, or regional), duration (short-term, lasting less than one year, or long-term, lasting more than one year), and intensity (negligible, minor, moderate, or major). Because definitions of intensity (negligible, minor, moderate, or major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed in this environmental assessment/assessment of effect.

In addition, National Park Service *Management Policies, 2001* (2000) require analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within a park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The impact is a prohibited impairment when, in the professional judgment of the responsible National Park Service manager, the impact would harm the integrity of park resources or values. An impact to any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents<sup>10</sup>.

Impairment may result from National Park Service activities, visitor activities, or activities undertaken by others operating in the park. A determination on impairment for each of the alternatives is discussed in the impact analysis sections in this chapter.

### 4.2 Cumulative Impacts

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as

"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7)<sup>11</sup>.

Cumulative impacts were determined by combining the impacts of the preferred alternative with other reasonably foreseeable future actions. The following actions are planned or proposed for Horseshoe Bend National Military Park and are considered, along with this action, when considering cumulative impacts:

- implement an approved Fire Management Plan;
- plan to replace existing wayside exhibits;
- plan to expand the headquarters building, and
- repavement of the park road and parking lots;

The cumulative impacts of this proposed action and these four planned or proposed activities are discussed in the following impact analysis sections in this chapter.

### 4.3 Impact Analysis - Geology, Topography and Soils

Horseshoe Bend National Military Park is located in the Piedmont Range on the southern tip of the Appalachian Mountains. The topography is relatively flat along the river floodplain, with rolling hills throughout much of the park. The elevation of the park ranges from 535 feet along the river to 680 feet at the higher ridge elevation. The elevation ranges from 535 feet along the river to 680 feet at the higher ridgelines. The granite, gneiss, and schist bedrock weather to produce well-drained reddish loamy or clayey soils<sup>12</sup>.

Assessments of potential impacts were based on the following table of definitions:

Minor Impact	Moderate Impact	Major Impact
The effects to soils would be detectable, but likely short-term; damage to or loss of the litter/humus layers may cause slight localized increases in soil loss from erosion; effects to soil productivity or fertility would be small, as would the area affected; short-term and localized compaction of soils does not stop re-vegetation; if mitigation were needed to offset adverse effects, it would be relatively simple to implement and would likely be successful. Changes in topography are limited to a few inches and cover relatively small areas. Geologic processes would not be impacted.	The effect on soil productivity or fertility would be readily apparent, long-term, and would result in a change to the soil character over a relatively wide area; loss of soil productivity may alter portions of vegetation communities; short-to long-term and localized compaction of soils may prohibit some re-vegetation; mitigation measures would probably be necessary to offset adverse effects and would likely be successful. Changes in topography would be measured in several feet or more over moderately large areas. Geologic processes would not be impacted.	The effect on soil productivity or fertility would be readily apparent, long-term, and substantially change the character of the soils over a large area; soil loss or damage may alter or destroy vegetation communities over large areas; long-term compaction of soils may prohibit desired re-vegetation; mitigation measures to offset adverse effects would be extensive, and their success could not be guaranteed. Changes in topography would be readily apparent and cover large areas, producing a striking change in the appearance of a portion of the park.

Threshold of Change - Geology, Topography and Soils  
Table 3

### **Effects of Alternative 1 (No Action)**

There would be no change in existing conditions and thus, no direct or indirect impacts to geology, topography and soils. Impacts associated with reasonably foreseeable future actions have the potential to be adverse, but because there is no ground disturbance associated with the no action alternative, this alternative would not be a component of such an overall cumulative impact.

There are no impacts to geology, topography and soils in this alternative.

### **Effects of Alternative 2 ( Replace in Place)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; installation of new shelters in the same locations; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the effects of equipment driving over the soil.

These impacts to geology, topography and soils would be adverse, but are site-specific and short termed. All impacts are restricted to the three sites and the access to those sites. Impacts will last only until the construction is completed and the new sod is placed over the remaining disturbed soils. There would be no appreciable loss to the litter/humus layer or increase in soil loss from erosion; localized compaction of soils would not prevent re-vegetation. This alternative would not lead to any changes in topography or geologic processes.

The impacts to geology, topography and soils in this alternative are minor.

### **Effects of Alternative 3 ( Relocate and Replace)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of two new sites including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; laying approximately 200 feet of new pavement rail; and the effects of equipment driving over the soil.

These impacts to geology, topography and soils would be adverse, but are site-specific and, except for the proposed excavation, are short term. All impacts are restricted to the three sites and the access to those sites. The excavation impacts an area approximately 14 feet by 22 feet at the bottom of Gun Hill. The maximum depth of proposed excavation is approximately 18 inches, tapering to surface level. All other impacts will last only until the construction is completed and the new sod is placed over the remaining disturbed soils. There would be no appreciable loss to the litter/humus layer or increase in soil loss from erosion; localized compaction of soils would not prevent re-vegetation. Topographic changes would be limited to inches and cover a relatively small area. This alternative would not lead to any changes in geologic processes.

The impacts to geology, topography and soils in this alternative are minor.



### **Effects of Alternative 4 ( Preferred Alternative)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of one new site including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the effects of equipment driving over the soil.

The impacts to geology, topography and soils would be adverse, but are site-specific and, except for the proposed excavation, are short termed. All impacts are restricted to the three sites and the access to those sites. The excavation impacts an area approximately 14 feet by 22 feet at the bottom of Gun Hill. The maximum depth of proposed excavation is approximately 18 inches, tapering to surface level. All other impacts will last only until the construction is completed and the new sod is placed over the remaining disturbed soils. There would be no appreciable loss to the litter/humus layer or increase in soil loss from erosion; localized compaction of soils would not prevent re-vegetation. Topographic changes would be limited to a few inches and would impact a relatively small area. This alternative would not lead to any changes in geologic processes.

The impacts to geology, topography and soils in this alternative are minor.

### **Cumulative Impacts Involving the Preferred Alternative**

The impacts to geology, topography and soils of the preferred alternative are minor and do not materially add to the impacts of the four projects currently planned or proposed for the park.

The implementation of the approved Fire Management Plan (FMP) will help prevent catastrophic fires which have the potential to cause substantial damage to soils; the FMP also authorizes the use of prescribed fires which, by burning under proper prescriptions, can help release nutrients into the soil, resulting in increased soil health. However, the impacts of the proposed action on geology, topography and soils are so minor and unrelated to the actions of the Fire Management Plan as to create no cumulative impacts.

The plan to replace existing wayside exhibits will not result in any impact other than digging 4 inch diameter holes for the stands; the proposal to expand the headquarters building involves soils already disturbed when the building was initially constructed; and the planned repaving of the park road and parking lots will remain on the footprint of existing roads and parking lots. These projects create negligible impacts to geology, topography and soils and do not contribute to significant cumulative impacts.

### **Summary, Geology, Topography and Soils**

The No Action alternative would result in no change in existing conditions and thus, no direct or indirect impacts to geology, topography and soils. All other alternatives result in only minor impacts to these resources.

The implementation of any of these alternatives would not result in major, adverse impacts to the geology, topography and soils resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Horseshoe Bend

National Military Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in relevant National Park Service planning documents. The implementation of any of these alternatives would not result in an impairment of the park's geology, topography and soils resources.

#### 4.4 Impact Analysis - Cultural, Archeological and Ethnographic Resources

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their proposals on historic properties, and to provide state historic preservation officers, tribal historic preservation officers, and, as necessary, the Advisory Council on Historic Preservation a reasonable opportunity to review and comment on these actions. The initial consultation process with the Alabama Historical Commission was initiated in February 2002. Comments from the Alabama Historical Commission can be found in Appendix B.

In 1976, Horseshoe Bend National Military Park was listed in the National Register of Historic Places. The three interpretive shelters proposed to be replaced by this action are located on portions of the historic battlefield. The preferred alternative would result in ground disturbance, thus increasing the possibility that cultural resources may be uncovered. Most of the ground disturbance is proposed to take place on previously disturbed ground, and since all artifacts discovered on the battlefield to date do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

Assessments of potential impacts were based on the following table of definitions:

Minor Impact	Moderate Impact	Major Impact
<p><b>Adverse impact</b> — the impact affects a site(s) with modest data potential and no significant ties to a living community's cultural identity; temporary effects to registered cultural resource sites, eligible cultural resource sites, sites with an undetermined eligibility, and traditional cultural properties; no affect to the character-defining features of a National Register of Historic Places eligible or listed structure, district. The determination of effect for §106 would be <i>no adverse effect</i>.</p> <p><b>Beneficial impact</b> — maintenance and preservation of a site(s). For purposes of Section 106, the determination of effect would be <i>no adverse effect</i>.</p>	<p><b>Adverse impact</b> — the impact affects a site(s) with high data potential and no significant ties to a living community's cultural identity; temporary adverse effects to registered cultural resource sites, eligible cultural resource sites, sites with an undetermined eligibility, and traditional cultural properties, but would not diminish the integrity of the cultural resource to the extent that its National Register eligibility is jeopardized. The determination of effect for §106 would be <i>adverse effect</i>.</p> <p><b>Beneficial impact</b> — stabilization of a site(s). For purposes of Section 106, the determination of effect would be <i>no adverse effect</i>.</p>	<p><b>Adverse impact</b> — the impact affects a site(s) with exceptional data potential or that has significant ties to a living community's cultural identity; long-term adverse impacts to registered cultural resource sites, eligible cultural resource sites, sites with an undetermined eligibility, and traditional cultural properties that would diminish the integrity of the cultural resource to the extent that its National Register eligibility is jeopardized; For purposes of Section 106, the determination of effect would be <i>adverse effect</i>.</p> <p><b>Beneficial impact</b> — active intervention to preserve a site(s). For purposes of Section 106, the determination of effect would be <i>no adverse effect</i>.</p>

Threshold of Change - Cultural, Archeological and Ethnographic Resources  
Table 4

### **Effects of Alternative 1 (No-Action Alternative)**

There would be no change in existing conditions and thus, no direct or indirect impacts to cultural and ethnographic resources. Impacts associated with reasonably foreseeable future actions are also deemed to have very little, if any, impact on cultural, archeological and ethnographic resources, but, since there is no ground disturbance associated with the no action alternative, this alternative would not be a component of any overall cumulative impact.

There are no impacts to cultural, archeological and ethnographic resources in this alternative. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Effects of Alternative 2 ( Replace in Place)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; installation of new shelters in the same locations; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

This alternative would require excavation of existing pavement at each of the three sites, which could potentially unearth items of archeological or ethnographic significance. The ground under and immediately surrounding the three shelters has been previously disturbed during the construction of those shelters, so the park believes it is very unlikely that items of significance will be unearthed during this project.

Additionally, the grounds surrounding the Cotton-patch Hill shelter and Gun Hill shelter have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

The park believes this alternative would result in only minor adverse impacts to cultural, archeological and ethnographic resources. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Effects of Alternative 3 ( Relocate and Replace)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of two new sites including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; laying approximately 200 feet of new pavement rail; and the short term effects of equipment driving over the soil.

This alternative would require excavation of existing pavement at each of the three sites, as well as excavation at two new sites. The park believes it unlikely that the excavation will unearth items of ethnographic significance. The ground under and immediately surrounding the three existing shelters has been previously disturbed during the construction of those shelters. The

ground around the two new shelter sites was farmed during the 100 year period prior to the park being established.

Additionally, the grounds surrounding the Cotton-patch Hill shelter and the Gun Hill shelter have been extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

The park believes this alternative would result in only minor adverse impacts to cultural, archeological and ethnographic resources. For purposes of Section 106, the determination of effect would be *no adverse effect*.

#### **Effects of Alternative 4 ( Preferred Alternative)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of one new site including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

This alternative would require excavation of existing pavement at each of the three sites, as well as excavation at one new site. The maximum depth of the proposed excavation at the new site is approximately 18 inches deep tapering to surface level, over an area of approximately 14 feet by 22 feet.

The park believes it unlikely the excavation will unearth items of archeological or ethnographic significance. The ground under and immediately surrounding the three existing shelters has been previously disturbed during the construction of those shelters. The ground around the new shelter site was farmed during the 100 year period prior to the park being established.

The ground surrounding the proposed new site for the Gun Hill shelter was extensively surveyed in April 2003 and January 2004 by NPS archeologists using metal detector / shovel testing methodology. Artifacts discovered during those surveys included musket balls, grape shot, projectile points, broken weaponry, and similar items. To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

The site will be carefully surveyed by an NPS archeologist prior to any work, and an NPS archeologist will be on site during the excavation of the site. A draft NAGPRA plan has been developed, and although it has not been finalized or approved, it would serve as an initial plan of action in the event of an inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. The proposed action at this site would be stopped and the affiliated Tribes immediately contacted.

The park believes this alternative would result in only minor adverse impacts to cultural, archeological and ethnographic resources. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Cumulative Impacts Involving the Preferred Alternative**

The impacts to cultural, archeological and ethnographic resources of the preferred alternative are minor and do not materially add to the impacts of the four projects currently planned or proposed for the park.

The implementation of the approved Fire Management Plan will help prevent catastrophic fires which have the potential to cause substantial damage to soils and buried cultural and ethnographic resources. There is the possibility that fire management activities may affect unrecorded cultural resource sites; known resources will be protected by prohibiting any mechanical equipment or disturbance at any site encountered. Prescribed fire will remove understory fuels under controlled conditions, preventing catastrophic fires. The controlled conditions of prescribed fire, with lower burning temperatures produce temperatures under 200 degrees F only a half inch below the surface<sup>13</sup>.

The plan to replace existing wayside exhibits will not result in any impact other than digging 4 inch diameter holes for the stands; the proposal to expand the headquarters building involves soils already disturbed when the building was initially constructed; and the planned repaving of the park road and parking lots will remain on the footprint of existing roads and parking lots. These projects create negligible impacts to cultural, archeological and ethnographic resources and do not contribute to significant cumulative impacts.

### **Summary, Cultural, Archeological and Ethnographic Resources**

The No Action alternative would result in no change in existing conditions and thus, no direct or indirect impacts to cultural, archeological and ethnographic resources. All other alternatives result in only minor impacts to these resources.

The implementation of any of these alternatives would not result in major, adverse impacts to the cultural, archeological and ethnographic resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Horseshoe Bend National Military Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in relevant National Park Service planning documents. The implementation of any of these alternatives would not result in an impairment of the park's cultural, archeological and ethnographic resources.

## **4.5 Impact Analysis - Cultural Landscapes**

The three interpretive shelters proposed to be replaced by this action are located on the historic battlefield. Two of the three shelters are located on mowed portions of the battlefield and tend to dominate the landscape and detract from the battlefield itself. The size, circular design and

position of the shelter in the open field all collaborate to create an artifact that grabs your attention, rather than allowing the topography of the landscape and the story to dominate.

The park endeavors to maintain a view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines. The visitors' attention should be captured by the natural topography before them, allowing them to visualize the position of the barricade and Creek warriors and the placement of the cannons and soldiers and the Indian allies. Because there is nothing left of the barricade, the Service has erected a row of white stakes to mark it's location. The view of these stakes and the natural topography of the battlefield are essential to understanding the battle and the heroic events which took place here.

Assessments of potential impacts were based on the following table of definitions:

Minor Impact	Moderate Impact	Major Impact
<p><b>Adverse impact</b> — impact(s) would not affect the character defining patterns and features of a National Register of Historic Places eligible or listed cultural landscape. The determination of effect for §106 would be <i>no adverse effect</i>.</p> <p><b>Beneficial impact</b> — preservation of character defining patterns and features in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes</i>. The determination of effect for §106 would be <i>no adverse effect</i>.</p>	<p><b>Adverse impact</b> — impact(s) would alter a character defining pattern(s) or feature(s) of the cultural landscape but would not diminish the integrity of the landscape to the extent that its National Register eligibility is jeopardized. The determination of effect for §106 would be <i>no adverse effect</i>.</p> <p><b>Beneficial impact</b> — rehabilitation of a landscape or its patterns and features in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes</i>. The determination of effect for §106 would be <i>no adverse effect</i>.</p>	<p><b>Adverse impact</b> — impact(s) would alter a character defining pattern(s) or feature(s) of the cultural landscape, diminishing the integrity of the landscape to the extent that it is no longer eligible to be listed in the National Register. The determination of effect for §106 would be <i>adverse effect</i>.</p> <p><b>Beneficial impact</b> — restoration of a landscape or its patterns and features in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes</i>. The determination of effect for §106 would be <i>no adverse effect</i>.</p>

Threshold of Change - Cultural Landscapes  
Table 5

### Effects of Alternative 1 (No-Action Alternative)

There would be no change in existing conditions and thus, no direct or indirect impacts to the cultural landscape. However, an opportunity to mitigate an existing impact on the cultural landscape would be lost; visitors would continue to be affected by the intrusiveness of the existing shelters. Impacts associated with reasonably foreseeable future actions are also deemed to have very little, if any impact on cultural landscapes.

There are no impacts to cultural landscapes in this alternative. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Effects of Alternative 2 ( Replace in Place)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; installation of new shelters in the same locations; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

Although this alternative better accomplishes the objectives of this proposed action than Alternative 1, by reducing the size of the visual impacts on the viewshed, it still does not fully remove the shelters from the battlefield. This alternative provides a minor benefit to the cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Effects of Alternative 3 (Relocate and Replace)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of two new sites including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; laying approximately 200 feet of new pavement rail; and the short term effects of equipment driving over the soil.

This alternative removes the existing shelters from the battlefield and reduces their size, thereby contributing to the park's desire to rehabilitate the cultural landscape. The new shelters would be smaller and constructed of natural looking materials and placed along the edge of the wood line. This placement would provide the visitor with an initial view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines. The visitors' attention would be captured by the natural topography before them, allowing them to visualize the position of the barricade and Creek warriors and the placement of the cannons and soldiers and the Indian allies.

This alternative provides a moderate benefit to the cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Effects of Alternative 4 ( Preferred Alternative)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of one new site including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

The cultural landscape impacts of this alternative are similar to those of alternative 3. Although this alternative removes only one of the existing shelters from the battlefield, the other shelter is hidden from view by bringing a small portion of the tree line closer to the new shelter. The area to be replanted consists of approximately ½ acre, where approximately 80 trees will be initially planted. This area was to the north of the battlefield and probably did not contribute to the battle, other than to have been along the route of the Federal troops.

Similar to alternative 3, this placement would provide the visitor with an initial view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines. This alternative

provides a moderate benefit to the cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect*.

### **Cumulative Impacts Involving the Preferred Alternative**

The cumulative impacts to the cultural landscape of this action and the four projects currently planned or proposed for the park are moderate, beneficial impacts, based on the beneficial effects of this action and the implementation of the approved Fire Management Plan.

Implementing the Fire Management Plan provides a moderate benefit by beginning a long process of slowly returning the forest to a condition similar to that which would have occurred approximately 200 years ago at the time of the battle. The action described in this document also provides a moderate benefit to the cultural landscape by reducing the intrusiveness of the existing interpretive shelters.

The plan to replace existing wayside exhibits will not result in any change to the existing cultural landscape since the current exhibits will be replaced in kind, resulting in the same number, same size, and at the same locations. The planned repaving of the park road and parking lots will remain on the footprint of existing roads and parking lots.

The proposal to expand the headquarters building involves a small expansion of approximately 15 x 60 feet, added to the existing building. The expansion takes place away from the battlefield, hidden by trees and hills.

These wayside exhibits, repaving and building expansion projects create negligible impacts to the cultural landscape and do not contribute to significant cumulative impacts. This action and the implementation of the Fire Management Plan contribute to moderate, beneficial impacts.

### **Summary, Cultural Landscapes**

The No Action alternative would result in no change in existing conditions and thus, no direct or indirect impacts to the cultural landscapes. Alternative 2 would result in minor beneficial impacts by reducing the size of the existing shelters, thus reducing the intrusiveness to the viewshed.

Both Alternatives 3 and 4 would result in moderate beneficial impacts to the cultural landscape by removing the existing shelters from the battlefield and reducing them in size. The new shelters would be tucked into the edge of the tree line, which will provide the visitor with an initial view of an open battlefield, dominated by surrounding tree lines of mature hardwoods and pines.

The implementation of any of these alternatives would not result in major, adverse impacts to the cultural landscape whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Horseshoe Bend National Military Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in relevant National Park Service planning documents. The implementation of any of these alternatives would not result in an impairment of the park's cultural landscape.



#### 4.6 Impact Analysis - Visitor Experience

Horseshoe Bend National Military Park is located in a rural section of east central Alabama 12 miles north of the town of Dadeville. The park is situated near the southern end of the Piedmont Plateau and encompasses 2,040 acres. It contains low rolling hills, which range in elevation from 535 feet to 680 feet above sea level. The park contains many species of plants endemic to the Piedmont region, and species associated with the Southeastern and Southern Coastal Plains. River bottomland borders each side of the Tallapoosa River which meanders through the park.

The visitor center is located inside the front gate to the park on Alabama Highway 49. The visitor center contains a small museum with exhibits related to the history of the Creek Indians, the events that led up to the battle, the battle itself and the aftermath. The battlefield is the park's primary historical resource. The Congressional Monument, the Jackson Trace Monument, the gravestone of Major Lemuel Montgomery and the barricade location posts are the primary features upon the landscape. The three interpretive shelters and 11 wayside exhibits help visitors understand the events that took place almost 200 years ago.

Special events are held on Saturdays and Sundays throughout the year and bring many visitors to the park. The local community utilizes the park on a daily and weekly basis. The nature trail and tour road are used for walking, running and general exercise along with those who want to view the wildlife in the park. Personal vehicles, bicycles, and occasional tour buses also use the 3-mile-long tour road. The nature trail is 2.8 miles long, traversing hills and valleys. The park offers recreational opportunities for boating, fishing, hiking and wildlife viewing. The park has two picnic facilities.

Recreational visits over the past 5 years have averaged about 108,000 visits annually, with heavier visitation during the spring, summer and fall. Weekend visitation is usually higher than weekday.

Assessments of potential impacts were based on the following table of definitions:

Minor Impact	Moderate Impact	Major Impact
Temporary displacement of visitors; temporary closure of trails, facilities, historic areas and/or recreation areas during off-peak visitation times; temporary or short-term alteration of the vista, or temporary presence of equipment in localized area; the visitor would be aware of the effects associated with the alternative, but the effects would be slight.	Changes in visitor use and/or experience would be readily apparent and likely long-term. Displacement of visitors; temporary closure of trails, facilities, historic areas and/or recreation areas would impact many visitors or would result in access issues which would be difficult to resolve. The visitor would be aware of the effects associated with the alternative but would still enjoy their visit to the park.	Alternative would result in very long term or permanent closure of trails, facilities, historic areas and/or recreation areas; the public would find it difficult to experience important portions of the park for significant periods of time. The visitor would be aware of the effects associated with the alternative and would find their park experience considerably diminished.

Threshold of Change - Visitor Experience  
Table 6

### **Effects of Alternative 1 (No-Action Alternative)**

There would be no change in existing conditions and thus, no direct or indirect impacts to the visitor experience. However, an opportunity to mitigate an existing impact on the cultural landscape would be lost; visitors would continue to be affected by the intrusiveness of the existing shelters. Impacts associated with reasonably foreseeable future actions are also deemed to have very little, if any impact on cultural landscapes.

There are no impacts to visitor experience in this alternative.

### **Effects of Alternative 2 ( Replace in Place)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; installation of new shelters in the same locations; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

This alternative would require the closure of the three small sites during the shelter removal and construction period. Construction equipment would be apparent in the park and on the battlefield. The construction period should be a relatively short time period of 6 to 8 weeks and would not affect the visits of large numbers of visitors. Those visiting the park would still be able to drive on the tour road, hike the trails, visit the visitor center/museum and see the park.

This alternative provides a minor impact to visitor experience.

### **Effects of Alternative 3 (Relocate and Replace)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of two new sites including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new shelter flooring consisting of grassy pavers, gravel or a similar porous material; laying approximately 200 feet of new pavement rail; and the short term effects of equipment driving over the soil.

The effects of this alternative are very similar to the effects of alternative 2. This alternative would also require the closure of the three small sites during the shelter removal and construction period. Construction equipment would be apparent in the park and on the battlefield. The construction period should be a relatively short time period of 6 to 8 weeks and would not affect the visits of large numbers of visitors. Those visiting the park would still be able to drive around the tour road, hike the trails and see the park.

This alternative provides a minor impact to visitor experience.

### **Effects of Alternative 4 ( Preferred Alternative)**

This alternative would result in the removal of existing shelters; removal of the paved pads underneath the existing shelters; preparation of one new site including a small amount of excavation into a hillside; the leveling of soils; installation of new shelters; installation of new

shelter flooring consisting of grassy pavers, gravel or a similar porous material; and the short term effects of equipment driving over the soil.

The effects of this alternative are very similar to the effects of alternatives 2 and 3. This alternative would also require the closure of the three small sites during the shelter removal and construction period. Construction equipment would be apparent in the park and on the battlefield. The construction period should be a relatively short time period of 6 to 8 weeks and would not affect the visits of large numbers of visitors. Those visiting the park would still be able to drive around the tour road, hike the trails and see the park.

This alternative provides a minor impact to visitor experience.

### **Cumulative Impacts Involving the Preferred Alternative**

The cumulative impacts to the visitor experience of this action and the four projects currently planned or proposed for the park are minor.

Implementing the Fire Management Plan provides a minor impact to visitor experience by requiring temporary closures of small portions of the park during fire activities. Fire management personnel and equipment would be apparent, and both fire and smoke would be noticeable to visitors. Burned vegetation would be apparent for two to four months following prescribed fire treatment.

The plan to replace existing wayside exhibits would affect a very limited number of visitors who would be present when the old exhibits are replaced in the park by the new exhibits. The planned repaving of the park road and parking lots will require one-way rerouting of traffic for a few days, and will require the closing of the loop portion of the park road for up to 5 days. Much of the road work will be done in the evening, to minimize disturbance to park visitors.

The proposal to expand the headquarters building involves a small expansion of approximately 15 x 60 feet, added to the existing building. The expansion takes place on the back side of the Visitor Center. The primary impact to visitors will be the presence of construction personnel, equipment and supplies.

The action described in this document provides a minor impact to visitor use by temporarily closing small areas during construction and by the presence of construction personnel and equipment in the park.

This action and the four planned or proposed actions: the wayside exhibit, repaving and building expansion projects and the implementation of the Fire Management Plan create minor impacts to the visitor experience and do not contribute to significant cumulative impacts.

### **Summary, Visitor Experience**

The No Action alternative would result in no change in existing conditions and thus, no direct or indirect impacts to visitor experience. Alternatives 2, 3 and 4 would result in minor impacts to visitor experience by temporarily closing small areas during construction and by the presence of construction personnel and equipment in the park.

The implementation of any of these alternatives would not result in major, adverse impacts to the cultural landscape whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Horseshoe Bend National Military Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in relevant National Park Service planning documents. The implementation of any of these alternatives would not result in an impairment of the park's cultural landscape.

## **5.0 Conclusions**

### **5.1 Effects on Natural Resources**

In this Environmental Assessment, impacts to natural resources have been examined in each of the 4 proposed alternatives. Alternative 1, the No Action alternative would not lead to any changes in the existing natural conditions and would not cause any direct or indirect impacts. Alternatives 2, 3 and 4 would all result in very similar, minor impacts to natural resources. Ground would be disturbed in very localized sites; there would be minor ground excavation; vehicles would be driven across the mowed battlefield and along a paved trail through the woods for a short distance.

None of the alternatives cause impacts to the natural environment that result in long term damage or result in effects that adversely impact the mission or purpose of the park.

### **5.2 Effects on Cultural Resources**

This Environmental Assessment examined potential impacts to park cultural resources and determined that alternative 1 would result in no potential impacts, but would also offer no improvement to the cultural landscape. Alternatives 2, 3, and 4 have the potential to cause minor impacts to cultural resources.

Excavation at existing sites and one or two new sites (depending on the alternative) have the potential to unearth artifacts, but the park believes it unlikely the excavation will unearth items of great archeological or ethnographic significance. Most of this ground has been previously disturbed, the sites were farmed during the 100 year period prior to the park being established and the area was extensively surveyed in April 2003 and January 2004. To date, all artifacts discovered on the battlefield do not include any human remains, funerary objects, sacred objects, or objects of cultural patrimony, and the park does not believe this proposed action will result in the discovery of items which are of a sensitive nature.

None of the alternatives diminish the integrity of the cultural resource to the extent that its National Register eligibility is jeopardized

### **5.3 Cumulative Effects**

The cumulative impacts of this action and the planned or proposed projects are minor.

Implementing the Fire Management Plan provides minor impacts to natural resources, cultural resources and visitor experience, but those impacts are not appreciably increased by this action. Installing new wayside exhibits will help increase visitor understanding and appreciation and will improve the aesthetics of the park. The very short term installation process will cause negligible impacts to the natural resources, cultural resources or the visitor.

The planned repaving of the park road and parking lots will cause negligible impacts to the natural resources or cultural resources and will cause only minor impacts to visitors, when portions of the park will be closed to traffic. The expansion of the headquarters building will have negligible impacts to the natural resources or cultural resources and will cause only minor impacts to visitors due to the presence of construction personnel, equipment and supplies.

The cumulative impacts of this action and the four planned or proposed actions: implementation of the Fire Management Plan; the wayside exhibit, repaving and building expansion projects create minor impacts and do not contribute to significant cumulative impacts.

#### 5.4 Comparison of Alternatives

The table below summarizes the environmental effects of the various alternatives. It provides a quick comparison of the proposed alternatives, and shows that none of the alternatives would cause either moderate or major impacts on natural resources, cultural resources or cumulative impacts.

	Alternative 1 No Action	Alternative 2 Replace in Place	Alternative 3 Relocate & Replace	Alternative 4 Preferred Alternative
Natural Resource Impacts	no impacts	minor impacts	minor impacts	minor impacts
Cultural Resource Impacts	no impacts	minor impacts	minor impacts	minor impacts
Cumulative Impacts	no impacts	minor impacts	minor impacts	minor impacts

Comparison of Effects  
Table 7

The following table compares the degree to which the four alternatives accomplish the stated objectives of the proposed action:

- Develop ways to minimize the visual impact of structures on the cultural landscape;
- Provide appropriate cover to park visitors from the heat of the summer sun, from thunderstorms and from lightning;
- select the best locations to understand the course of the battle; and
- minimize disruption to the natural environment.

	Alternative 1 No Action	Alternative 2 Replace in Place	Alternative 3 Relocate & Replace	Alternative 4 Preferred Alternative
Minimize visual impacts	low	medium	high	high
Protection from the elements	high	high	high	high
Understand the battle	high	high	medium	high
Minimize disruption of environment	high	high	medium	medium
high = more completely achieves objective; low = less completely achieves objective				

Comparison of Accomplishment of the Objectives  
Table 8

Alternative 1, the No Action alternative scores high on meeting three of the objectives, but scores low on the objective of minimizing visual impacts. Alternative 2, Replace in Place scores medium on the objective of minimizing visual impacts, but scores high on the other three objectives. Alternative 3, Relocate and Replace scores high on two objectives but only medium on Understanding the Battle and Minimizing Disruption of the Environment.

The Preferred Alternative, #4, scored high on three of the objectives, and medium on the objective of Minimizing Disruption of the Environment. It should be noted that this disruption is so minimal as to be considered a minor impact to natural resources.



## 6.0 Consultation and Coordination

### 6.1 Internal Scoping

National Park Service (NPS) personnel began discussion of this need and proposed alternatives in August, 2002. The following NPS personnel have been involved in those discussions:

- Roy Appugliese, Park Ranger, Horseshoe Bend National Military Park
- Anita Barnett, Environmental Planner, Southeast Regional Office
- Randall Becker, Park Ranger, Horseshoe Bend National Military Park
- Rod Blanton, Park Ranger (retired) Horseshoe Bend National Military Park
- Jim Cahill, Chief Ranger, Horseshoe Bend National Military Park
- Denesia Cheek, Hydrologist, Southeast Regional Office
- John Cornelison, Archeologist, Southeast Archeological Center
- Steve Crowder, Chief of Maintenance, Horseshoe Bend National Military Park
- Vicki Garrett, Administrative Support Assistant, Horseshoe Bend National Military Park
- David Hasty, Historical Landscape Architect, Southeast Regional Office
- Ove Jensen, Chief of Interpretation, Horseshoe Bend National Military Park
- Faye Johnson, Administrative Officer, Horseshoe Bend National Military Park
- Mark Lewis, Superintendent, Horseshoe Bend National Military Park
- Joe Martin, Architect, Southeast Regional Office
- Richard Ramsden, Chief, Architecture Division, Southeast Regional Office
- Dan Scheidt, Chief, Cultural Resource Division, Southeast Regional Office
- Bill Thornell, Maintenance Mechanic, Horseshoe Bend National Military Park
- Steve Vines, Maintenance Worker, Horseshoe Bend National Military Park
- Don Wollenhaupt, Chief, Division of Interpretation, Southeast Regional Office

### 6.2 External Scoping

In conjunction with the park's Long Range Interpretive Plan, the park held a session discussing the existing Interpretive shelters and some of the alternatives. This meeting was held on January 16, 2003. The following individuals participated in this scoping session:

- Ralph Banks, Local Resident and Park Volunteer, Horseshoe Bend National Military Park
- Joyce Bear, Historic Preservation Officer, Muscogee (Creek) Nation
- James Bird, Cultural Resources Director, Eastern Band of Cherokee Indians
- Dr. Kathryn Braund, Professor of History, Auburn University, Alabama
- Paul Farmer, Vice-President, Tallapoosa County Historical Commission, Alabama
- Ove Jensen, Chief of Interpretation, Horseshoe Bend National Military Park
- Mark Lewis, Superintendent, Horseshoe Bend National Military Park
- Mary Mallen, Interpretive Planner, Harpers Ferry Center
- Mike Manning, Park Ranger (transferred), Horseshoe Bend National Military Park
- Jim Parker, Site Manager, Fort Toulouse - Fort Jackson State Historical Park, Alabama
- Emily Patterson, Teacher, Dadeville, Alabama Elementary Schools
- Chris Revels, Chief Ranger, Kings Mountain National Military Park

- Steve Vines, Maintenance Worker, Horseshoe Bend National Military Park
- Don Wollenhaupt, Chief, Division of Interpretation, Southeast Regional Office

The recommendations from the Long Range Interpretive Plan<sup>14</sup> included, "Construct shelters more harmonious with the historic scene."

### 6.3 Public Notification

Copies of this Environmental Assessment have been made available at the following public libraries:

Alexander Public Library, Alexander City, Alabama  
Dadeville Public Library, Dadeville, Alabama

Copies of this Environmental Assessment have been mailed to:

Charles Shaw, Chairman, Tallapoosa County Commission  
Dylan Oliver Noble, Commissioner, Tallapoosa County Commission

Notification of this Environmental Assessment was printed in the Alexander City / Dadeville "Outlook" on October 22 (see Appendix A)

### 6.4 Agency Consultation

Horseshoe Bend National Military Park began discussion with the Alabama Historical Commission concerning this action in February, 2002. The Commission was updated in May, 2004, and received a letter of concurrence on this action dated, May 8, 2004. (see Appendix B)

A request for comments and concurrence has been made with the US Fish and Wildlife Office, Daphne, Alabama.

### 6.5 Tribal Consultation

The park sent letters informing the affiliated Tribes of this proposed action on August 11, 2004. The letter informed the Tribes of the proposed actions and described the resulting ground disturbance and the possibility that cultural resources may be uncovered. This letter invited comments or questions, and/or the opportunity to initiate formal consultation. (see Appendix C)

The affiliate Tribes who received this letter were:

Alabama-Quassarte Tribal Town	Muscogee (Creek) Nation
Alabama-Coushatta Tribe of Texas	Poarch Creek Indians
Cherokee Nation	Seminole Nation of Oklahoma
Coushatta Indian Tribe	Seminole Tribe of Florida
Eastern Band of Cherokee Indians	Thlopthlocco Tribal Town
Kialegee Tribal Town	United Keetoowah Band of Cherokee Indians
Miccosukee Indian Tribe	

## 7.0 References

### Glossary & Acronyms

Adverse Effect	an impact which diminishes any characteristic of a cultural resource to the point that it begins to lose its cultural significance;
CEQ	Council on Environmental Quality;
E.A.	Environmental Assessment;
Impact	any change to the resource brought on, directly or indirectly, by this action;
NAGPRA	Native American Graves Protection And Repatriation Act;
NEPA	National Environmental Policy Act;
NHPA	National Historic Preservation Act;
SHPO	State Historical Preservation Officer (Alabama Director, Alabama Historical Commission);
§ 106	a section of NHPA directing how federal agencies ensure protection of cultural resources;

### Bibliography

- 1 Public Law 840800 .....
- 2 Horseshoe Bend National Military Park *Strategic Plan* (2003)
- 3 Bonnicksen, T.M. (2000) *America's Ancient Forests: From the Ice Age to the Age of Discovery*
- 4 California Department of Food and Agriculture web page *The Noxious Weed Data Sheets* Updated: February 22, 2001 <http://pi.cdfa.ca.gov/weedinfo/CENCHRUS2.htm>
- 5 Cornelison, Jon, National Park Service Southeast Archeological Center Unpublished Report (2004)
- 6 National Park Service *DO-28 Cultural Resource Management Guidelines*
- 7 Horseshoe Bend National Military Park *Animal Species List* (2004)
- 8 Title 50 Code of Federal Regulations 17.11
- 9 Federal Register 46-18026 (March 23, 1981)
- 10 National Park Service *Management Policies* (2001)
- 11 Title 40 Code of Federal Regulations § 508.7
- 12 California Department of Food and Agriculture web page *The Noxious Weed Data Sheets* Updated: February 22, 2001 <http://pi.cdfa.ca.gov/weedinfo/CENCHRUS2.htm>
- 13 DeBano, L.F.; Dunn, P.H.; Conrad, C.E. Fire's effect on physical and chemical properties of chaparral soil (1977)
- 14 Horseshoe Bend National Military Park *Long Range Interpretive Plan* (2004)

## Appendix A

### ***The Outlook, Alexander City / Dadeville, Alabama***

#### **Public Announcement:**

Horseshoe Bend National Military Park is seeking comments concerning a proposal to replace the three existing interpretive shelters, located on the battlefield, with smaller, wood and stone shelters to be located along the tree line.

Copies of the Draft Environmental Assessment are available at the park headquarters and at the public libraries in Dadeville and Alexander City.

Comments concerning the proposal will be accepted through November 26<sup>th</sup>, 2004, and may be emailed to: [HOBESuperintendent@nps.gov](mailto:HOBESuperintendent@nps.gov) or mailed to: Superintendent, Horseshoe Bend National Military Park, 11288 Horseshoe Bend Rd, Daviston, AL 35256

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